Ontario
Health Quality Ontario

QUALITY MONITOR

HEALTH QUALITY ONTARIO

2012 REPORT ON ONTARIO'S HEALTH SYSTEM

This report is a tool for driving a culture of quality, value, transparency and accountability throughout the health system in Ontario. We hope this report will help everyone – patients, caregivers, healthcare providers and healthcare leaders – understand the publicly funded health system better, so that all of us can hold ourselves and the system accountable for demonstrating continuous quality improvement.

This report is prepared in partnership with

ICES Institute for Clinical Evaluative Sciences

Table of Contents

1 INTRODUCTION AND SUMMARIES 2

1.1 Executive summary 2
1.2 Attributes framework 6
1.3 Data advocacy 7

Sector summaries
1.4 Hospital sector summary 8
1.5 Primary care summary 10
1.6 Home care summary 12
1.7 Long-term care summary 14

2 ACCESSIBLE 16

Accessible summary 16

3 EFFECTIVE 20

Effective summary 20

4 SAFE 26

Safe summary 26

5 PATIENT-CENTRED 30

Patient-centred summary 30

6 EFFICIENT 32

Efficient summary 32

7 APPROPRIATELY RESOURCED 34

Appropriately resourced summary 34

8 INTEGRATED 36

Integrated summary 36

9 FOCUSED ON POPULATION HEALTH 38

Focused on population health summary 38

10 EQUITABLE 40

Equitable summary 40

11 LHIN ANALYSES 43

LHIN analyses 43

12 EXAMPLES OF SUCCESS 58

12.1 Alternate Level of Care (ALC) 58
12.2 Access 59
12.3 Chronic Obstructive Pulmonary Disease (COPD) 60
12.4 Other successes 62

13 ENDNOTES 65

14 ACKNOWLEDGEMENTS 71

15 MEMBERS OF HEALTH QUALITY ONTARIO 72

1.1 Executive summary

Ontario's publicly funded healthcare system is under intense pressure from a combination of spiralling costs, an aging population and government budgetary austerity. The challenge of delivering high-quality care to all Ontarians remains, however, critically important. In order to meet the needs of the population, Ontario's healthcare system must consistently adopt evidence-based practices that can improve outcomes, eliminate waste in the system and organize the delivery of healthcare around the patient to create a smooth journey for the individual. This is essential to ensuring that our health system is sustainable for future generations.

One of the roles of Health Quality Ontario (HQO) is to monitor and report to Ontarians on how well our healthcare system is performing. This *Quality Monitor* is HQO's seventh annual report. It describes how the different parts of the system – primary care, home care, long-term care and hospitals – perform across nine dimensions of quality: accessible, effective, safe, patient-centred, equitable, efficient, appropriately resourced, integrated and focused on population health. It analyzes whether quality has improved or worsened and, where possible, how Ontario compares to best-performing jurisdictions in Canada and internationally.

HQO also has a role in driving change throughout the system. It identifies the evidence-based practices that healthcare providers should implement, and recommends practice standards, also based on evidence, that organizations need to follow. It makes recommendations on how health services should be funded in order to encourage the highest quality. It amasses knowledge about the different tools or approaches that are useful in implementing best practices and spreads this knowledge to healthcare providers.

To that end, this year's *Quality Monitor* is divided into a series of two-page themes. The first page describes key findings and presents data on how we compare to others and whether or not we have improved. The second page describes improvement strategies. It highlights the evidence-based practices that should be implemented, including those recommended by the Ontario Health Technology Assessment Committee (OHTAC), now part of HQO. It also lists practical ideas on how to implement best practices, and references 'change packages' developed by HQO that describe these implementation tips in greater detail. Ideas for implementation include specific improvements to processes of care, tips on how to measure quality and feed back results to providers, clinical decision supports to remind providers to carry out important tasks, staff skills that need to be developed, resources that need to be acquired or reconfigured, opportunities for patient engagement to enhance implementation, and accountability mechanisms or incentives that need to be designed. These strategies for improvement are also classified according to the different audiences that have to implement them – providers, patients and policy-makers.

This year's printed version of *Quality Monitor* features a more compact design to enhance readability. Additional content, including full graphs for all indicators, will be made available online in stages after the print report is released. There are two-page summaries of key findings for hospitals, long-term care, homecare and primary care, with questions intended to stimulate self-reflection in leaders and caregivers. This year's report continues to highlight local success stories closely linked to its key findings that demonstrate improvement is possible. Additional stories will also be made available online.

HOW WE COMPILED THIS REPORT

HQO examined data from sources that include Ministry of Health and Long-Term Care (MOHLTC) databases, Statistics Canada census data and international surveys from the Commonwealth Fund and others. The Institute for Clinical Evaluative Sciences (ICES) helped us conduct many of the data analyses. Researchers, clinical experts and healthcare executives reviewed our findings for accuracy and validity.

KEY FINDINGS

All sections of this year's report point to one overall theme: progress is being made in many areas, but it has been slow. In order for Ontario's healthcare system to achieve true excellence, the rate of progress needs to be accelerated. Three areas in particular demonstrate the extent to which this is the case:

- chronic disease management and avoidable hospitalizations
- wait times
- hospital safety

Chronic disease management and avoidable hospitalizations

Chronic diseases are common within the Ontario population. Although there are some positive signs of improvement in the management of chronic diseases, there is still huge room for improvement. People are not routinely receiving all of the evidence-based best practices in chronic disease management that could maintain their health. Care is fragmented, especially when people are discharged from hospital or move from one provider to another or have multiple providers. This creates excessive burden on individuals and their families, and leads to hospitalizations and readmissions that likely could be avoided.

On the positive side, complications of diabetes, such as heart attacks, strokes, amputations and kidney failure, are on the decline, and the use of recommended medications to further reduce these complications is rising. This rise, however, is slow and there is room to increase the use of appropriate drugs. Furthermore, only half of people with diabetes are getting the recommended annual eye exam and only 61% have their feet checked regularly. More than half of people with chronic diseases eat poorly and are physically inactive. Many continue to smoke, one in four is obese, and obesity rates are rising. Poor health habits are more common among those with low income or education level; addressing this equity gap will be essential to improving overall population outcomes.

Many chronic diseases fall into the category of ambulatory-care sensitive conditions for which, if primary care is optimized, hospitalizations could be reduced. Over the past seven years, there has been a steady decrease in the rate of hospital admissions for such conditions and Ontario's rate is now lower than that of most other provinces. However, British Columbia has lower rates and specific regions in Ontario have rates well below the provincial average.

Discharge transitions among people admitted to hospital are poor and many people leave hospital without key information. For example, only one half of people discharged from hospital know when to resume usual activities and only 59% know what danger signs to watch for at home. These figures are even worse for those discharged from emergency departments. In addition, follow-up care is not consistently arranged. For example, one in three patients discharged from hospital for a mental health condition did not have a follow-up physician visit within 30 days of discharge.

Poor coordination at discharge contributes to readmission rates. For chronic conditions such as congestive heart failure or chronic obstructive pulmonary disease, one in five people is readmitted within 30 days after discharge. Ontario can do better. Some leading sites in the United States have achieved readmission rates that are half of Ontario's rates, by creating a reliable discharge-coordination and follow-up process.

Strategies for improvement

Chronic disease management:

Good chronic disease management depends on both patient engagement and strong health system performance. Patients have responsibilities for adopting a healthy lifestyle, understanding their condition and following a mutually agreed upon treatment plan. Health providers need to closely monitor patients and ensure they are offered all of the recommended drugs, treatments or therapies. To accomplish this, the health system needs to improve its abilities to:

- provide timely access to primary care and specialized services (e.g. rehabilitation);
- ensure regularly scheduled follow up takes place;
- ensure providers regularly review use of all recommended best practices at each scheduled visit;
- offer some form of more intensive management for people identified as being at higher risk, where changes in symptoms or lab values are tracked frequently and immediate adjustments to treatment are made;
- offer self-management support, where patients learn to set and meet their own goals;
- have robust measurement systems so that providers can track how well they are doing on use of best practices, and make this a standard feature of electronic medical records;
- implement policies to encourage healthy behaviour such as better food labelling, restrictions on marketing of unhealthy foods and bans in schools, taxes on unhealthy activities and investments in creating safe, healthy communities with access to exercise; and
- hold organizations accountable for quality, through contracts, accountability agreements or funding mechanisms.

Hospital readmissions and discharge transitions:

Some leading American hospitals are achieving significant reductions in hospital readmissions through the use of standardized processes, better patient communication and better follow up after discharge. Examples include the following:

- provide written discharge instructions in simple language;
- employ "teach-back" strategies, where staff ask patients explain discharge instructions to verify their comprehension;
- ensure timely, appropriate follow up with primary care;
- assess the risk that the individual will be readmitted (based on standardized tools already in existence) and ensure that arrangements for more intensive follow up are made for those at highest risk;
- set and implement standards for timely transmission of information from hospital to primary care, such as discharge summaries and care plans; and
- use standard orders and discharge checklists to ensure patients have the correct medication and the follow-up they need.

Leading hospitals using these techniques are achieving readmission rates for congestive heart failure of less than 10%, or half of Ontario's rate.[1] It will be important to test whether this level of success can be repeated at Ontario sites. If so, then this should become the new target toward which the system should strive.

Wait times

Wait times exist in all parts of the healthcare system. On the positive side, there have been major improvements in some areas (CT and MRI) and slight improvements in other areas (emergency department waits). However, for primary care visits and placement into a long-term care home, waits remain far too long.

Waits for CT scans are now half of what they were three years ago and, for 90% of people getting a CT scan, the wait is less than four weeks. There has also been a major reduction of 25% in waits for MRIs over the past year. These decreases may be due to increased capacity as well as recent efforts in some sites to improve the efficiency of their scheduling processes.

[1] Boutwell, A. Griffin, F. Hwu, S. Shannon, D. Effective Interventions to Reduce Rehospitalizations: A Compendium of 15 Promising Interventions. Cambridge, MA: Institute for Healthcare Improvement; 2009.

The length of stay for emergency department (ED) patients has decreased slightly over the past three years, by about half an hour. While this is welcome, waits are still too high. High-complexity patients spend on average 11.5 hours in the ED, while low-complexity patients spend 4.4 hours. The provincial targets are eight and four hours respectively. Surgical wait times decreased significantly from 2005 to 2009 but have worsened slightly in the past year, by about three weeks for hip or knee replacements and cataract surgery. In addition, a greater proportion of people having elective surgery get their surgery within the target time than do people needing urgent surgery, with about one-third of urgent cancer or hip or knee replacement surgeries not happening within the target time frame.

In primary care, only half of sicker adults could see a doctor or nurse the same or next day when they were unwell, compared to 79% in the United Kingdom, where there has been significant investment in training of primary care workers to implement advanced-access scheduling to help providers better manage wait lists. Wait times to see a specialist are poor, with almost half of sicker adults in Ontario waiting four weeks or more. Ontario (and Canada as a whole) is tied with Norway for the worst standing among 11 countries in timely access to specialist care.

Wait times to get into a long-term care (LTC) home remain far too long – close to four months. After increasing sharply between 2005/06 and 2008/09, however, wait times for LTC have at least stabilized and stopped increasing over the past two years. In addition, more people are being referred to LTC in recent years from the community than from a hospital bed, reflecting greater use of the "Home First" approach, which defers decisions about LTC until the person is back at home with increased home care assistance, allowing a more reliable assessment of his or her needs. Partly as a result of the delays in getting into LTC homes, people who need an alternative level of care (ALC) are responsible for 17%, or roughly one in six, hospital days in acute care hospitals in Ontario. This problem has worsened in the past five years.

Strategies for improvement

In recent years, many Ontario EDs have been implementing process improvements to reduce waits. As part of these improvements, they:

- streamlined processes to reduce turn-around time for lab work or other services;
- developed special zones for different types of patients (e.g., fast-track areas or observation units);
- created flexible schedules for physicians and other staff to enable increased staffing during peak periods or surges in demand;
- used information systems to track where the greatest backlogs are occurring; and
- helped patients who are using the ED as a last resort find the services they really need, such as a primary care or a mental health provider.

Process improvements within the ED are helpful, and there is likely more that could be done. However, major progress will occur only when hospitals are able to ensure that patients admitted from the ED always have an inpatient bed to go to. Often, beds are not immediately available due to the high number of ALC patients, as noted above, many of whom are waiting for LTC placement. Thus, addressing this problem is critical to improving ED wait times.

There are many approaches to reducing LTC wait times. Among them, health decision makers and providers can:

- improve access to home care;
- provide supportive housing, where individuals live in their own apartments within a complex that has caregivers readily available. One region in Alberta has developed supportive housing options that are less costly than LTC, and LTC waits there remain at less than one month;
- prevent "deconditioning", or loss of physical functioning and sense of autonomy, as is done by leading hospitals through rehabilitation programs, thus avoiding patients being put on wait lists for LTC; and
- adopt a "Home First" approach that assumes that it is premature to declare a person in need of LTC just after admission to hospital and delays such decisions until patients are discharged from hospital to their homes with additional home care support as needed, so that a more accurate assessment of the need for LTC can be made.

There are many approaches to reducing primary care wait times. Primary care providers can:

- apply the principles of advanced access and improved office efficiency;
- track wait times and incoming demand for appointments;
- ensure that supply and demand are better matched; and
- search for efficiencies, such as handling issues over the phone or by e-mail, or delegating tasks to other team members.

Hospital safety

Ontario has made some progress in reducing some hospital-acquired infections. There have been steady decreases in both ventilator-associated pneumonia (VAP) and central line infections (CLIs), which are associated with a high mortality rate in intensive care units. Unfortunately, *C. difficile* rates have increased slightly in the past year, reversing the gains made in previous years. Hand hygiene compliance before patient contact in hospitals has also improved, from 53% in 2008 to 72% in 2011. The provincial SaferHealthcareNow! and "Just Clean Your Hands" campaigns may have contributed to these improvements. There is still room to do better, as many leading hospitals have eliminated VAP and CLIs. Hand hygiene rates, in particular, should continue to rise towards 100%. Hospitals need to continue to be vigilant in following all established infection-control procedures.

Deaths among patients in hospitals are decreasing, with the majority of hospitals seeing a decrease in the past year in their hospital-standardized mortality rate (HSMR). The mortality rate one month after a heart attack has dropped to 8.2% in 2009/10 from a high of 10% six years earlier. Stroke mortality rates have seen similar declines.

Strategies for improvement

There are many well established "bundles" of evidence-based practices for reducing different types of hospital infections or reducing mortality:

- central line infections can be eliminated by using proper sterile technique, checking the site daily for infection and removing the line as soon as possible;
- deaths from sepsis can be reduced by early identification of cases, giving antibiotics without delay, and treating low blood pressure aggressively;
- venous thromboembolism can be prevented by giving blood thinners to patients at risk of blood clots;
- surgical complications can be reduced by using antibiotics and blood thinners and maintaining normal temperature and blood sugar; and
- medication error can be minimized by using strategies such as medication reconciliation, unit dosing, pre-mixed IV solutions, or computerized order entry.

The challenge for healthcare organizations is to ensure that these evidence-based practices are implemented not just some of the time, but all of the time. Inconsistency occurs for a number of reasons, including:

- lack of knowledge of all of these practices or providers who feel busy or rushed with other work and forget to implement them;
- lack of a standard process for implementation, which further increases the risk that an important task will be overlooked;
- variations in skills among staff in carrying out a task;
- physical design flaws that may make it impractical to implement the practice; and,
- providers who may not have bought into the importance of adopting the best practice, and there may be inherent resistance to change.

There are many strategies for ensuring reliable adoption of best practices. Hospitals can:

- continuously measure performance and feed back information to providers, such as the practice by leading hospitals of measuring hand hygiene compliance frequently (e.g., every month) and posting results by department;
- provide checklists, standard order sets or other clinical decision supports to help remind providers what to do and when;
- establish standard processes, engage staff in the design of these processes, test them thoroughly to ensure they are as efficient as possible and monitor compliance;
- train staff and, possibly more important, verify that staff have learned how to apply the task properly and consistently; and,
- engage patients, for instance by encouraging them to remind providers to wash their hands if they have not done so.

CONCLUSION

In all of these areas and in many others identified in the report, strategies for improvement can go a long way toward improving the quality of Ontario's healthcare system. The single most important factor in achieving the quality Ontarians want and deserve is leadership and accountability for quality and safety. Strong leaders generate commitment to quality by providing repeated messages across the organization, demonstrating an interest in quality improvement activities and celebrating success. They set bold targets for improvement in outcomes in their provincially mandated quality improvement plans and hold themselves and their managers and staff accountable for results. They empower staff to make changes at the front line to improve their processes and give them the training and time needed to do so. All of these activities create a culture of safety, value and accountability within the healthcare system that will propel it to the level of excellence that Ontarians expect and deserve.

1.2 Attributes framework

The attributes of a high-performing health system.

Ontarians want their health system to be:

ACCESSIBLE

People should be able to get timely and appropriate healthcare services to achieve the best possible health outcomes.

For example, when a special test is needed, you should receive it when needed and without causing you extra strain and upset. If you have a chronic illness such as diabetes or asthma, you should be able to find help to manage your disease and avoid more serious problems.

EFFECTIVE

People should receive care that works and is based on the best available scientific information.

For example, your doctor (or healthcare provider) should know what the proven treatments are for your particular needs including the best ways of coordinating care, preventing disease or using technology.

SAFE

People should not be harmed by an accident or mistakes when they receive care.

For example, steps should be taken so that elderly people are less likely to fall in long-term care homes. There should be systems in place so you are not given the wrong drug, or the wrong dose of a drug.

PATIENT-CENTRED

Healthcare providers should offer services in a way that is sensitive to an individual's needs and preferences.

For example, you should receive care that respects your dignity and privacy. You should be able to find care that respects your religious, cultural and language needs and your life's circumstances.

EQUITABLE

People should get the same quality of care regardless of who they are and where they live.

For example, if you don't speak English or French it can be hard to find out about the health services you need and to get to those services. The same can be true for people who are poor or less educated, or for those who live in small or far-off communities. Extra help is sometimes needed to make sure everyone gets the care they need.

EFFICIENT

The health system should continually look for ways to reduce waste, including waste of supplies, equipment, time, ideas and information.

For example, to avoid the need to repeat tests or wait for reports to be sent from one doctor to another, your health information should be available to all of your doctors through a secure computer system.

APPROPRIATELY RESOURCED

The health system should have enough qualified providers, funding, information, equipment, supplies and facilities to look after people's health needs.

For example, as people age they develop more health problems. This means there will be more need for specialized machines, doctors, nurses and others to provide good care. A high-performing health system will plan and prepare for this.

INTEGRATED

All parts of the health system should be organized, connected and work with one another to provide high quality care.

For example, if you need major surgery, your care should be managed so that you move smoothly from hospital to rehabilitation and into the care you need after you go home.

FOCUSED ON POPULATION HEALTH

The health system should work to prevent sickness and improve the health of the people of Ontario.

For example, people should receive preventive health services that can avoid cancer, infectious diseases or other conditions. Individuals need to follow a healthy lifestyle and the health system should support the population to do so.

1.3 Data advocacy

In order to ensure Ontarians have a complete account of the quality of their healthcare system, Ontario needs to continue to invest in data collection. Although Ontario already has some of the best data in Canada, there are still major gaps. In some cases, the data exist but are inaccurate or difficult to access, while in other cases, there are no data at all.

HQO believes it is important to advocate for improved data. Better data means improved reporting, and improved reporting is essential to better care. This year, HQO has worked with stakeholders and experts to identify the questions about quality that we cannot answer without better data, why the questions are important, and ideas on how data can be obtained.

WHAT DATA DO WE WANT?	HOW WOULD WE GET IT?	WHAT INFORMATION WOULD WE GET FROM IT?
DATA ON CHRONIC DISEASE MANAGEMENT AND PRIMARY CARE ACCESS	• Adoption of national electronic medical record (EMR) content standards • Standardized entry of EMR data • Province-wide EMR adoption • Use of EMR data to create provincial disease registries	• Chronic Diseases Management: How many people in Ontario have certain conditions? Are people getting the right drugs? Are they being monitored regularly for their conditions? Are chronic diseases well controlled? Are physical measures and test results of people with these chronic conditions (e.g., blood pressure, weight, cholesterol levels) within the desired range? • Access: Are people receiving timely appointments in order to avoid potentially harmful delays? • Performance: How well are our primary care providers performing? What is the quality of care in primary care?
COMPREHENSIVE DRUG UTILIZATION DATA	• A comprehensive drug utilization database that includes all Ontarians (not just those aged 65+)	• Effectiveness: Are people receiving the right drugs? • Adverse events: How frequently are drug errors (e.g., drug interactions, wrong dose, wrong drug) occurring? • Is there information that will help detect inappropriate prescribing or dispensing activity? • Is there information on whether or not patients are being prescribed medications that reflect best practice guidelines? • Do we have trending information the types of medications dispensed?
CLIENT EXPERIENCE DATA	• Implement provincial primary care, mental health and long-term care client experience surveys • Standardized hospital surveys aligned to a common national standard	• Patient experience: How do users of healthcare services feel about the care they receive with respect to communication, courtesy, involvement in decisions and responsiveness to concerns? • Access: Are people able to get the services they need in a timely manner? • Patient-reported outcomes: How do people perceive their health and the impact that treatments/services have on their quality of life?
APPROPRIATENESS OF SERVICES DATA	• Collection of data on appropriateness criteria for select services • Electronic order entry systems where this data could be entered	• Efficiency: Are people receiving unnecessary tests, surgeries or other procedures? • Best practices: Are people receiving care that is based on the best evidence, such as OHTAC recommendations?

1.4 Hospital sector summary

Acute care hospitals: summary for boards, CEOs, senior management and clinical leaders

Ontario hospitals submit annual quality-improvement plans as required by the *Excellent Care For All* Act. These plans describe priorities for improvement and numeric targets to achieve in the fiscal year. Hospitals select indicators from a standard list and can add additional indicators as desired. This section summarizes the progress made in the most frequently chosen topics in quality improvement plans.

TOPIC AREA	KEY FACTS	KEY QUESTIONS FOR HEALTHCARE LEADERS AND STAFF TO CONSIDER
1. RIGHT CARE IN THE RIGHT PLACE – ALC (SEE SECTION 6)	• People who need an alternative level of care (ALC) are responsible for 17%, or roughly one in six, hospital days in acute care hospitals in Ontario. This problem has worsened in the past five years, making it an urgent priority in Ontario.	• Can we identify people at risk for being ALC earlier, so that home care services can be arranged before their health deteriorates? • Are we using rehabilitation resources to help patients recover their function and return home to live as independently as possible? • Are we working with CCACs to apply the Home First approach? • Are we working with other stakeholders to promote supportive housing models or similar options for frail individuals? • What services need to be developed in the community or in LTC homes to better serve ALC patients?
2. HOSPITALIZATIONS FOR AMBULATORY CARE SENSITIVE CONDITIONS (ACSCs) AND READMISSIONS (SEE SECTION 3)	• Over the past seven years, there has been a steady decrease in the rate of hospital admissions for many chronic conditions where hospitalization might have been avoided through better primary care. The most common conditions are congestive heart failure (CHF) and chronic obstructive pulmonary disease (COPD). Ontario's rate is now lower than most other provinces, but higher than some regions in Canada. There is still likely room to improve. • Readmissions occur frequently. For common conditions like CHF and COPD, about one in five patients is readmitted within one month. There has been little or no improvement in readmissions in recent years, except for heart attack, where readmissions have declined significantly.	• Can we work with primary care providers to improve chronic disease management and prevention so patients are less likely to need hospitalization? • Are we identifying people at high risk for readmission and performing early discharge planning? • Are we making sure patients have all the information they need when they are sent home? • Do patients at high risk for readmission have a follow-up appointment with family doctor, home care or specialist soon after discharge? • How quickly are we transferring discharge summaries to family physicians?
3. DISCHARGE/ TRANSITIONS (SEE SECTION 8)	• Many patients are not getting the information they need when leaving the hospital or emergency department (ED). Only half of ED patients know what danger signs to look out for at home and only six in ten patients know whom to call if they need help. About half of hospital patients don't know when to resume normal activities. Although most patients know how to take the medications, about a third do not know what side effects to watch for.	• Are written discharge instructions routine for all of our patients? • Are we giving patients and families a chance to ask questions? • Are we ensuring there is a documented timely follow-up appointment with primary care and home care if needed? • Is there a "warm handoff" between the most responsible physician in hospital and the primary care provider? • Have we considered post-discharge phone calls to the patient from the hospital? • Have we considered using patient navigators or case managers?
4. EMERGENCY DEPARTMENT (ED) WAIT TIMES (SEE SECTION 2)	• The total time spent by patients in EDs has decreased slightly (by about half an hour) over the past three years, but is still too high – 11.5 and 4.4 hours for high- and low-complexity patients respectively. The provincial targets are 8 and 4 hours respectively.	• Are we moving patients who do not need to be receiving care in the hospital to the right place as quickly as possible? (See ALC questions above). • Are we using Lean process improvement techniques to streamline ED processes? • Have we considered diverting non-urgent cases away from the ED to alternatives that are most appropriate for their conditions? Are we informing people about primary care after-hours services, community clinics and telephone health advisory services? • Can we work with other stakeholders to improve primary care services so patients are less likely to need ED care?

TOPIC AREA	KEY FACTS	KEY QUESTIONS FOR HEALTHCARE LEADERS AND STAFF TO CONSIDER
5. WAIT TIMES FOR SPECIALISTS, SURGERY AND CT/MRI (SEE SECTION 2)	• Wait times to see a specialist are poor. Almost half of sicker adults in Ontario waited four weeks or more to see a specialist. Ontario and Canada are tied with Norway for the worst standing among 11 countries in achieving timely access to specialist care. • Wait times for CT and MRI have improved. Waits for CT scans are now half of what they were three years ago and for 90% of people getting one, the wait is less than four weeks. For MRI, there has been a major reduction just in the last year of 25%. • Wait times for many surgeries saw huge reductions from 2005 and 2009. However, there has been a slight worsening of wait times (by about three weeks) for hip and knee replacements and cataract surgery. • While the large majority of elective surgery cases are done within the target time, many urgent cases miss their target time – for example, approximately one-third of urgent cancer, hip and knee replacements are not done within the recommended time frame.	• Do we use appropriateness criteria to ensure that patients truly require surgery or tests? • Are there ineffective hand-offs, poor communication or lack of standardized processes that contribute to delays? • Can we ensure some excess capacity for services associated with surgery such as space in the intensive care unit? • Are we using electronic booking systems that ensure all relevant information is captured before a booking can proceed? • Have we considered centralized booking systems that could connect patients to places with the shortest wait time? • Do we monitor key process metrics, such as on-time case starts and downtime, so we can maximize our efficiency and increase our capacity? • Do we measure supply and demand and do we know if they are in balance? • Have we ever done queue-clearing blitzes — for example, temporarily increasing the rate of procedures done until backlog is eliminated?
6. HOSPITAL ACQUIRED INFECTIONS AND MORTALITY (SEE SECTION 4)	• Ontario has made progress in reducing hospital-acquired infections. Proper hand hygiene compliance before patient contact in hospitals has improved in the past three years, from 53% to 72%. Devastating infections like ventilator-associated pneumonia (VAP) and central line infections (CLI) are decreasing steadily. Unfortunately, *C difficile* rates have increased slightly in the past year, reversing gains made in previous years. Hospitals need to continue to be vigilant in following established infection control procedures. • Deaths among hospital in-patients are decreasing. The majority of hospitals have seen a decrease in the past year in their hospital standardized mortality ratio, which examines deaths for the most common conditions for which people come to hospital. Specifically, there have been impressive reductions in deaths after heart attacks and stroke. There is very likely room to continue to improve.	• How well are we following care bundles for preventing hospital infections and reducing mortality? • Do we use standard process maps to ensure key best practices in each bundle happen consistently and in the right order? • Are we auditing hand hygiene frequently (more than just once a year) and providing feedback to staff on compliance (monthly or quarterly, by ward or by provider group)? • Are hand washing stations conveniently located, never empty, and being used? • Are we encouraging patients to ask providers if they have washed their hands? • Are we regularly using standardized checklists, order sets or protocols to minimize reliance on memory? If so, are we actually tracking how we are using them and if they are having an effect? • Are we promoting a culture of safety, where people feel free to speak up if they see a safety issue? Are we encouraging patients to ask questions about safety?
7. PATIENT EXPERIENCE (SEE SECTION 5)	• There are major opportunities for improving patient experience around communication, engagement in decisions and coordination of care. About one in three hospital patients does not get answers to questions he or she can understand.	• Do we use methods such as "teach-back" to verify patients understand all the information they have been given? • Do we have translators for people who speak different languages? • Are we providing clinically focused customer service and cultural competence training to our staff?
8. HOSPITAL DEFICITS (SEE SECTION 6)	• Almost one in four hospitals reported a deficit in FY 2010/11. Compared to the previous year, the number of hospitals in deficit decreased by 15%. The largest decrease was among large community hospitals.	• While the first instinct when facing a deficit is to cut services, has hospital management carefully thought of all the different sources of waste in the system and made aggressive plans to eliminate them (e.g., unnecessary tests or services and waste of staffing, space, inventory and supplies)?
9. INFORMATION TECHNOLOGY (IT) (SEE SECTION 7)	• Ontario hospitals are making steady progress in implementing IT internally. Almost all hospitals handle diagnostic images electronically now. However, there is still poor interconnectivity between hospitals and other healthcare organizations and providers; only 21%, for example, can send electronic referrals.	• Can our IT systems connect to pharmacies, labs, hospitals and other providers? • What clinical performance indicators are, or are not, tracked by our IT systems? Which ones need to be tracked in the future? How quickly can this information be fed back to providers?

1.5 Primary care summary

Primary care: summary for primary care providers, leaders and decision makers

Primary care is the cornerstone and point of entry to the healthcare system and the place where the majority of health services are initiated and coordinated. Primary care focuses on services related to health promotion, illness and injury prevention, as well as the diagnosis, assessment, treatment and management of chronic conditions. Optimal access to quality primary care services is a key determinant of Ontarians' health outcomes.

TOPIC AREA	KEY FACTS	KEY QUESTIONS FOR HEALTHCARE LEADERS AND STAFF TO CONSIDER
1. ACCESS TO PRIMARY CARE (SEE SECTION 2)	• Waits to see a primary care physician are still far too long. Only half of sicker adults could see a doctor or nurse the same or next day when they were unwell. The UK has invested heavily in training its primary care workforce to implement advanced access scheduling to help providers manage their wait lists better. It has the best result for sicker adults who could see a doctor or nurse the same or next day: 79%.	• Are office efficiency and scheduling models, such as advanced access, being used and promoted to allow practices to provide faster access to primary care services? • Are we tracking wait times and incoming demand for appointments and matching them with supply? Are our EMRs enabled to track such information? • Are we promoting primary care models that provide after-hours access to care? • Are we working in a team? Are we using each team member to his/her fullest capacity? • Are we setting expectations for low wait times in accountability agreements with service providers?
2. CHRONIC DISEASE MANAGEMENT (SEE SECTION 3)	• There are some positive signs of improvement in the management of chronic diseases. Complications arising from diabetes, such as heart attacks, strokes, amputations and kidney failure, are on the decline. The use of recommended medications, such as statins for cholesterol control, ACEI/ARBs and beta-blockers, is generally rising although slowly. However, there is still huge room for improvement. More people could still be on these drugs, and many people with diabetes are not getting regular monitoring of their feet and eyes. Many people with chronic diseases still smoke, have poor diet and do not get enough exercise, and obesity rates are rising.	• Are we using methods such as flow sheets to remind us of all best practices to follow? • If we have an EMR, does it provide us with data on the percentage of our patients on the right drugs and who have received the proper tests? • Do we know the community supports available for our patients to help them sustain healthy living? • Have patients identified their own goals for improving their health? Do they know their targets for good disease control (e.g., blood pressure < 130/80 for diabetes or A1C < 7)? Have they all been connected with a chronic disease self-management program?
3. PATIENT EXPERIENCE (SEE SECTION 5)	• About one in four sicker adults do not get to ask enough questions or feel involved in decisions about care. About one in three sicker adults do not believe someone always coordinates the care they receive from other doctors or places.	• Are we allowing enough time for questions from patients and families? • Are we promoting standardized patient experience surveys that provide the opportunity to get patients' insight and feedback on services received? • Are we making the best use of patient information resources to inform patients of their treatment options? • Do we have proper integrated health information systems that enable patient information sharing and coordination of care?
4. TRANSITIONS (SEE SECTION 8)	• About one in three patients hospitalized for a mental health condition do not have follow-up visits arranged within 30 days of discharge.	• Have we prioritized time in our schedule to see recently discharged patients promptly? • Have we worked with the local hospital to ensure there is a reliable process for notifying primary care practices about hospital admissions and discharges? • Do we have a process for assessing risk and prioritizing sicker patients for follow-up visits?

TOPIC AREA	KEY FACTS	KEY QUESTIONS FOR HEALTHCARE LEADERS AND STAFF TO CONSIDER
5. HEALTHY BEHAVIOURS (SEE SECTION 9)	• Ontario has made important progress on smoking in the last decade, but there has been no improvement on physical inactivity or poor fruit and vegetable intake, and obesity is gradually getting worse. There is still room to improve, and British Columbia outperforms Ontario in many of these areas.	• Do we ask our patients about their smoking cessation at each visit? Do we have a list of all smoking cessation supports in our community for our patients? • Are we motivating people to change unhealthy behaviour by setting self-management goals? • Are we advocating for healthy food choices in local schools and restaurants, and access to exercise?
6. PREVENTIVE HEALTH (SEE SECTION 9)	• There is still room for improvement in preventive measures to keep the population healthy. More than one-third of seniors did not receive a flu shot, a ten percentage point decrease from 2005, when Ontario recorded its best performance. About one-third of eligible women still do not have a mammogram and nearly one in four women did not have a Pap test within the recommended timeframes. Rates of screening for colorectal cancer have increased in recent years, but more progress is needed in order to hit the provincial target of 40%.	• Do we use flow sheets to remind us of all the health prevention interventions that need to be done during periodic health exams? • Are we using registries to send reminders to patients for preventive services and follow-up care? • Do we provide easy access to vaccinations outside primary care offices? • Are we promoting payment models that set expectations for providers to schedule and follow up on screening tests?
7. EQUITY (SEE SECTION 10)	• Vulnerable populations within Ontario continue to have greater difficulties maintaining a healthy lifestyle, use preventive services less frequently, and have worse health outcomes. People with low income and less education are at greatest risk.	• How can we improve our outreach to people with low income or less education to improve health behaviours or preventive screening? What barriers need to be addressed – cultural differences, low literacy, transportation, convenience of office hours, location of services? • For low-income groups, have we considered reducing cost barriers to sports and recreation programs, nutritious food and nicotine replacement therapies? • Do we guide immigrants on how to properly seek primary care and preventive services? Are they being provided services in a language and manner that they can understand?

1.6 Home care summary

Home care: Summary for home and community care leaders, staff and clients

Home care (HC) supports people with complex medical, clinical and psycho-social needs who have difficulty caring for themselves, and helps them live independently in their homes. In Ontario, community care access centres (CCACs) provide client assessments and care coordination services, and arrange nursing or personal support services, physiotherapy, occupational therapy, speech-language therapy, social work, nutritional counselling and related medical supplies and equipment. To assist HC clients, CCACs work closely with primary healthcare providers and community support services. The information below on quality of HC services for long-stay CCAC clients identifies areas for improvement and solutions to consider.

TOPIC AREA	KEY FACTS	KEY QUESTIONS FOR HEALTHCARE LEADERS AND STAFF TO CONSIDER
1. HC WAIT TIMES (SEE SECTION 2)	• Nine out of ten HC clients discharged from hospital, receive their first HC visit within seven days of discharge, while those referred from the community wait nine days.	• Are we involved early during the hospital stay to assist people with timely transition to HC services? • Are we screening adults in the community for their need for HC services early, before their problems coping at home escalate? • Are potential clients of HC services fully aware of the types of support they are entitled to? • Is client information well coordinated within the HC sector and among the sectors to allow timely access to services?
2. LONG-TERM CARE PLACEMENT (SEE SECTION 6)	• The median wait for placement into a long-term care (LTC) home is 113 days, which is too long. At the same time, approximately one in five people placed in LTC homes do not have high or very high care needs, suggesting their needs could potentially be met elsewhere. Although this indicator has improved in the last two years, there is still room to improve.	• Are we aware of and using alternatives to LTC for those who do not need the full range of LTC services? Could more individuals benefit from increased HC, day programs, exercise or rehabilitation programs? Could supportive housing options, which allow them to live on their own but in complexes that have some level of on-site care available, reduce some of the demand for LTC?
3. FALLS (SEE SECTION 4)	• More than one in four HC clients reported having a fall in the last 90 days. This has worsened slightly in the last two years.	• Are risk assessments for falls being done routinely and consistently? • Do we do routine safety assessments? Are we checking for poor lighting in the home? Are safety aids (e.g., grab bars) consistently being installed and used? • Are we encouraging the use of mobility aids (e.g., walkers) and checking for proper use? • Do high-risk clients exercise or receive appropriate physiotherapy and/or rehabilitation to improve strength and balance? • Are any clients on a drug with side effects that might cause a fall? Are we working with primary care providers to ensure that regular medication reviews are done and those at risk for falls are taking vitamin D and calcium? • Do we screen clients for vision problems? • Do we routinely determine the origin of a client fall and fix the root cause?

TOPIC AREA	KEY FACTS	KEY QUESTIONS FOR HEALTHCARE LEADERS AND STAFF TO CONSIDER
4. PRESSURE ULCERS (SEE SECTION 4)	• Among HC clients, 7.9% have had a new or worsening pressure ulcer (stage 2 to 4) over the previous 6 months. This has not improved in recent years.	• Are HC clients at risk for developing ulcers identified early? Are risk assessments periodically updated? • Are HC workers well trained in detecting early signs of pressure ulcers? Are they checking for these signs regularly? • Are high-risk clients getting special padding or mattresses to avoid ulcers on pressure points?
5. BLADDER INCONTINENCE SEE SECTION 3)	• More than half of HC clients either failed to improve or experienced a recent decrease in bladder function compared to their previous assessment. This has worsened in recent years.	• Is there a standard process for screening for and assessing incontinence problems? • Are HC clients being offered "prompted voiding" protocols? Are there enough staff with the right training to teach this technique? • Are we working with primary care to identify potential candidates for surgery for incontinence?
6. INJURIES (SEE SECTION 4)	• More than one in ten HC clients reported unexplained injuries assessed over the past 90 days; however, these events are often underreported or undisclosed, and so this rate may be artificially low. No change has been seen in the past two years.	• Are we checking for safety hazards in the home (e.g., hot water temperature, unsafe electrical outlets and clutter)? • Are formal and informal caregivers of HC clients knowledgeable about injury signs? Do they have access to educational resources?
7. PAIN CONTROL (SEE SECTION 3)	• More than one-third of all persons receiving HC services experience daily, intense pain – enough to disrupt their ability to perform normal activities. This has worsened in recent years.	• Are HC clients getting accurate pain assessment? Are staff trained to recognize pain, even in people with dementia or difficulty communicating? • Are we working with primary care providers and pain specialists to develop pain management protocols?
8. PRIMARY CAREGIVER BURDEN (SEE SECTION 7)	• Nearly one in four caregivers of HC clients reports experiencing feelings of distress and/or being unable to continue in caring activities. This has increased over the past two years.	• What supports are available in the community for primary caregivers of HC clients? • Are primary caregivers aware of respite and adult day programs for HC clients? • Are caregiver-directed programs accessible for those who care for HC clients?

1.7 Long-term care summary

Long-term care: summary for LTC leaders, staff, residents and family members

Ontario's long-term care (LTC) homes provide 24-hour personal support, supervision, nursing and medical care to more than 76,000 people across the province. Placement into LTC homes is based on need and is coordinated by Ontario's Community Care Access Centres. To help residents stay as healthy and independent as possible, LTC homes offer a wide range of care and services, including nursing care, medical treatment, physiotherapy, rehabilitation, special diets and nutrition, and recreation therapy. Providing residents with safe, effective care in a nurturing, home-like environment promotes a positive quality of life.

TOPIC AREA	KEY FACTS	KEY QUESTIONS FOR HEALTHCARE LEADERS AND STAFF TO CONSIDER
1. LTC WAIT TIMES AND PLACEMENTS (SEE SECTION 2)	• The median wait time for placement into a LTC home is 113 days – nearly four months. Although LTC wait times have stabilized (i.e., stopped increasing) over the past two years, the wait is still too long. Given that the current wait is almost four times longer than it was in spring 2005, there is still substantial room for improvement. At the same time, more than one in five people placed in LTC homes from home care (HC) do not have high or very high care needs, suggesting their needs could potentially be met elsewhere.	• Are alternatives to LTC being developed for those who do not have high or very high needs? Could these persons benefit from more HC, day programs, exercise or rehabilitation programs, or supportive housing options? • Are there enough specialized homes to meet the needs of Ontario's communities? Is there a need for more culturally specific homes or homes that are equipped to handle particular conditions such as complex behavioural issues?
2. FALLS (SEE SECTION 4)	• One in seven LTC residents fell in the past month.* • One in 40 LTC residents experienced a fall that resulted in an emergency department visit in the past year. • No changes have been seen in these areas compared to last year, and the considerable variation in the rate of falls across Ontario's LTC homes suggests there is likely room for improvement.	• Are falls risk assessments being done and kept up to date? • Are residents receiving regular exercise or physiotherapy to maintain lower-body strength and balance? • Are LTC homes ensuring safe living spaces for their residents, for example by eliminating clutter and ensuring proper lighting? • Is protective equipment, such as high/low beds or hip protectors, being used? • Are LTC physicians and nurses working together with pharmacists to review whether residents are taking drugs that might contribute to a higher risk of falls? • Are vision problems (which can lead to falls) being regularly assessed and corrected?
3. PRESSURE ULCERS (SEE SECTION 4)	• Nearly one in 36 LTC residents had a pressure ulcer that got worse, or developed a new, serious pressure ulcer in the preceding three months.*	• Are residents with a high ulcer risk being placed on special, high-density foam mattresses? • How could funding mechanisms for these mattresses be redesigned so that LTC homes receive funding before, and not after the ulcer occurs? • Are all staff, including new hires or temporary staff, trained in recognizing early signs of pressure ulcers before they escalate? • Are immobile residents who need to be turned regularly getting this done consistently?

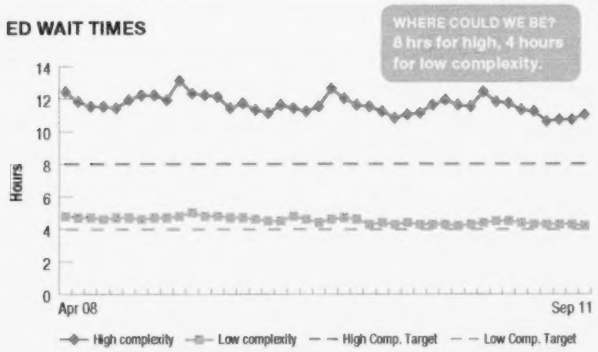
TOPIC AREA	KEY FACTS	KEY QUESTIONS FOR HEALTHCARE LEADERS AND STAFF TO CONSIDER
4. RESTRAINTS AND WORSENING BEHAVIOURS (SEE SECTION 4)	• Nearly one in six LTC residents were physically restrained.* No change has been seen over the past year; there is still room for improvement. • Nearly one in seven LTC residents displayed worsening behaviors in the past three months.* No change has been seen in the past year.	• Are LTC staff and residents' families being properly educated on the risks associated with restraints (e.g., falls and pressure ulcers)? • Are alternatives to restraints being used to the fullest extent? (Examples include alarms to signal when someone is wandering, or high-low beds instead of bed rails). • Are non-drug strategies for managing dementia-related behaviours, such as music programs and touch therapy, being used? Is there an adequate range of social and leisure activities in the home? • Because undiagnosed pain can bring out behavioural problems, is pain being recognized in people with dementia or difficulty communicating?
5. BLADDER INCONTINENCE (SEE SECTION 3)	• About one in five LTC residents experienced a decline in bladder function in the past three months.* There has been no change in the past year.	• Are we maximizing the use of strategies like prompted voiding and bladder training to help improve residents' continence? Are there available staff with the right training to teach these techniques? • Are residents being assessed to see if they could benefit from surgery for incontinence?
6. PAIN (SEE SECTION 3)	• Approximately one in eight LTC residents experienced moderate to severe daily pain in the past three months.* There has been no change in the past year.	• Is pain being documented as if it were the "fifth vital sign"? Are staff trained to recognize pain, even among those with dementia or communication difficulties? • Are standard pain protocols being used in the home? Is the full range of pain medications being used, including non-narcotic drugs (e.g., nortriptyline, gabapentin, steroid joint injections)? • Are non-drug therapies for pain, such as physiotherapy or massage, being used to the fullest?
7. WORSENING DEPRESSION (SEE SECTION 3)	• About one in four residents with depression experienced worsening symptoms since their last assessment.* These rates have remained stable over the past year.	• Is there a broad enough range of social, leisure, entertainment and exercise activities available? Are residents happy with these activities? • Are there opportunities for residents to contribute meaningfully to the life of the community? • Are we using volunteers or doing enough to encourage visitors? • Has pet therapy been considered? • If non-drug approaches fail, have residents been offered anti-depressants?
8. AVOIDABLE EMERGENCY DEPARTMENT VISITS (SEE SECTION 4)	• For every 100 LTC residents, 5.6 visited an emergency department last year because of an ambulatory care sensitive condition – that is, a condition that could possibly have been prevented had the underlying cause been managed earlier on.	• Are there clinical protocols to identify and address early signs of an exacerbation of chronic disease before it escalates into something worse? • Are physicians available to assess a resident on-site for a worsening problem when requested? If not, could nurse practitioners be used? Are there alternatives to on-site assessment, such as remote assessments via telemedicine links?

* Based on the rolling average of four previous fiscal quarters (twelve months).

2 | Wait times in emergency departments, access to primary care, long-term care and home care

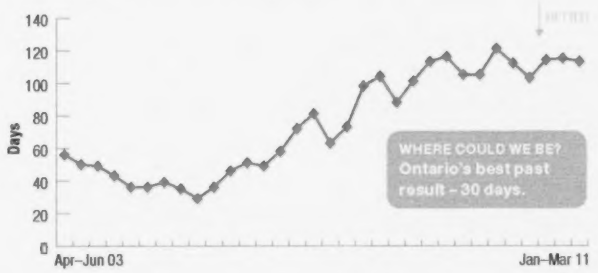
Ontario's health system must provide timely access to the right healthcare services in order to achieve the best possible health outcomes. Ontarians should have optimal access to a primary care provider to provide preventive care, treat acute illnesses, manage chronic diseases and coordinate referrals. Long waits for an appointment should be avoided so that people's medical condition will not worsen while waiting and people will only go to emergency departments (EDs) as a last resort.[1] Excessive waits in the ED may compromise patients' margin of safety and increase the risk of poor outcomes.[2] People who need long-term care (LTC) and home care (HC) should access services promptly to obtain the appropriate level of care, ensure a safe environment and allow them to get the personal care or rehabilitative services they need to function.

ED WAIT TIMES



The total time spent by patients in EDs has decreased slightly over the past three years but is still too high – 11.5 and 4.4 hours for high- and low- complexity patients, given the provincial targets of 8 and 4 hours, respectively. Recent activities to reduce ED wait times, such as the ED Performance Improvement Program and a pay-for-performance scheme[3] may have contributed to this decrease. However, hospitals must continue to implement process improvements in order to reach provincial targets.

WAIT TIMES TO GET INTO LTC HOME



Wait times to get into an LTC home continue to be too high — close to four months. Wait times increased sharply between 2005/06 and 2008/09, but have stabilized (i.e., stopped increasing) in the past two years.

Primary Care Access: Waits to see a primary care physician are still far too long. Only half of sicker adults could see a doctor or nurse the same or next day when they were unwell. The UK has invested heavily in training its primary care workforce to implement advanced access scheduling to help providers manage their wait lists better. It has the best results, with 79% of sicker adults able to see a doctor or nurse the same or next day when they were sick.

INDICATOR		LATEST RESULT	PROGRESS?	WHERE COULD WE BE?
WAIT TIMES IN EDs	90th percentile length of stay for ED patients: – High complexity – Low complexity	 11.5 hours* 4.4 hours*	Slight improvement	 8 hours (MOHLTC target). 4 hours (MOHLTC target).
	ED patients who left without being seen	3.5%*		As low as possible.
	90th percentile time to physician initial assessment	3.4 hours*		
ACCESS TO PRIMARY CARE	% of sicker adults who do not have a regular doctor or place to go for medical care	3.2%**	n/a	0%, Netherlands.
	% of sicker adults who could see a doctor or nurse on the same or next day the last time they were sick	50%**	n/a	79%, UK.
	% of sicker adults who stated it was easy to get medical care in the evening/on weekend/holiday without going to ED	31%**	n/a	65%, UK.
ACCESS TO LTC AND HC	Median number of days to LTC home placement	113 days†	No change in past 2 years	29 days – Ontario's best past result (spring 2005).
	90th percentile wait time from application/discharge to first HC service, by location: – From community – Hospital	 9 days†† 7 days††	 No change Improved	 As low as possible.

Data source: *NACRS, provided by MOHLTC 2010/11; **Commonwealth Fund International Health Policy Survey of Sicker Adults, 2011; †MOHLTC Long-term Care Client Profile Database, Jan–Mar 2011; Data reflects non-crisis placements ††Discharge Abstract Database (DAD), HCD, RPDB, Fiscal Quarter 4 2010/11, provided by ICES

IDEAS FOR IMPROVEMENT	PATIENT	POLICY	PROVIDER
Wait times in emergency departments:			
Measurement/feedback: Consider using **ED information systems** that can pinpoint exact sources of delays, signal when a test is ready for review, and monitor improvements. Some systems use radio-frequency ID (RFID) tags to track patient movement.[4] **Electronic in-patient bed tracking systems** can immediately tell the ED when a bed is available for an admitted patient.[5]			●
Processes: Create **designated zones** for different types of patients (e.g., fast-track areas, observation units), as specialization can improve efficiency.[6] Use **Lean process improvement** techniques to streamline processes, reduce turnaround time for labs or other services. Consider **flexible physician/staff schedules** to allow extra staff to come in during peak periods or surges in demand. **Smooth out utilization spikes** during the week in elective surgery scheduling and hospital discharges. Such patterns (e.g., more discharges on Fridays, few on weekends) can lead to variations in ED wait times.[7,8]			●
Patient engagement: Use **written discharge instructions** or **"teach-back"** to verify that patients understand instructions and decrease return visits (see section 3 – chronic disease management). Help ED patients without a family doctor find one, and refer to services such as Health Care Connect.[9] **Identify ED patients with unmet needs** (e.g., those with mental health conditions or frail elderly persons) and connect them to other services, such as a mental health counselling program or home care. Encourage patients to use **after-hours services** where they exist (e.g., at their Family Health Team, urgent care centres).[10]	●		●
Access to primary care:			
Measurement/feedback: Primary care practices should ideally **track wait times and incoming demand** for appointments and ensure demand does not exceed the actual number of appointments that can be supplied. In Alberta, all EMRs approved for use must track this information.[11]		●	●
Processes – Schedule processes such as Advanced Access and Efficiency: Implement the principles of advanced access scheduling, which involves: monitoring supply and demand for appointments; ensuring supply and demand are matched; re-shaping supply and demand; having contingency plans; and working down the backlog.[12] Improve efficiency and eliminate unnecessary visits or wasted time in the office to increase time available for more appropriate visits. Consider handling issues over the phone, delegating tasks to other team members, improving the office layout to minimize walking or set up rooms the same to avoid wasted time searching for supplies.[13]		●	
Incentives: Consider **accountability agreements or contracts** with expectations for keeping wait times low. Community Health Centres now have 'third next available appointment' in their accountability agreements with LHINs.[14] Family Health Teams and other models of care are expected to provide after-hours services.		●	
Patient engagement: Educate patients about when they do or do not need to see a provider. **Handle issues over the phone or by e-mail** to reduce the number of visits required. Let patients **schedule appointments on-line**. Refer patients without primary care to the province's **Health Care Connect service** which helps them find a care provider.[15]	●		
Access to long-term care and home care:			
See strategies for reducing Alternate Level of Care Days (section 6).			

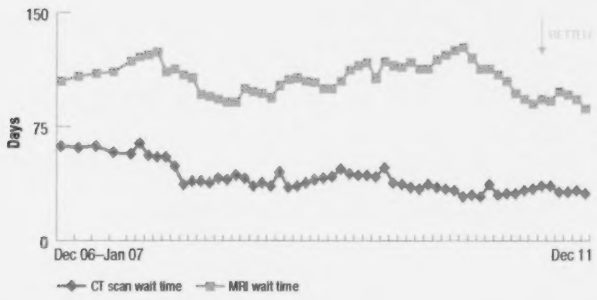
What is happening in Ontario?

- **HQO resources for improvement:** HQO offers tools, resources and coaches for primary care teams that aim to reduce wait times and improve processes (see www.hqontario.ca). The Advanced Access & Efficiency for Primary Care initiative is now in its fourth wave and has enrolled 200 teams in 2011/12. Over the preceding three years, 217 family practices also received this type of support.
- **The Emergency Department Performance Improvement Program** (ED-PIP) is completing its fourth and final wave. This initiative, begun in 2009, has supported 61 EDs to implement the process improvements described above with the help of expert coaches and practical tools (see www.patientflowtookit.ca).
- **Family Health Teams** (FHTs) were introduced in 2005 as part of Ontario's strategy to improve access to primary care, chronic disease management and health promotion. Teams include doctors, nurse practitioners, registered nurses and other professionals such as dieticians, social workers, or pharmacists. FHT patients can access after-hours support from a nurse through the Telephone Health Advisory Service at 1-866-553-7205. 200 Family Health Teams have been implemented and are now serving patients.[16]

2 | Treatment wait times and access to specialists

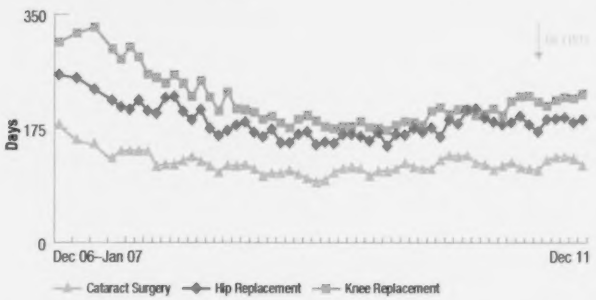
When people are sick, they may need specialist visits, surgery, specialized therapy or tests. Waiting too long for a specialist can lead to inconvenience, stress and anxiety,[17] as well as a longer period of suffering from symptoms until they can be treated. More extreme waits can lead to a more extensive surgical procedure or a more advanced stage of disease. Long waits for joint replacement, for example, can lead to worsened physical function and increased pain,[18,19] while excessive waits for coronary interventions carry an increased risk of repeat myocardial infarction and mortality.[20]

90TH PERCENTILE WAIT TIME FOR CT & MRI



MRI wait times have seen a major reduction (25%) in the past year. Waits for CT scans have dropped steadily and are now half of what they were three years ago. For 90% of people, the wait is less than four weeks. Waits may have improved because capacity has increased; some individual hospitals have also made efforts to improve processes and reduce inefficiencies (see next page).

90TH PERCENTILE WAIT TIME FOR HIP AND KNEE REPLACEMENT AND CATARACT SURGERIES



Ontario saw huge reductions in wait times for many surgeries from 2006 to 2009. In the past two years, however, there has been a slight worsening of wait times (about three weeks) for hip and knee replacements and cataract surgery. Hospitals need to continue to be vigilant about these wait times or risk losing the gains that Ontario made in the past decade.

Almost half of sicker adults in Ontario waited four weeks or more to see a specialist. Internationally, Ontario and Canada are on par with Norway for the worst standing in achieving timely access to specialist care.

INDICATOR			LATEST RESULT				PROGRESS?	WHERE COULD WE BE?
			90TH PERCENTILE WAIT	% OF SURGERIES/PROCEDURES DONE WITHIN TARGET TIME BY PRIORITY LEVEL:				
				URGENT	SEMI-URGENT	ELECTIVE		
TREATMENT WAIT TIMES AND ACCESS TO SPECIALISTS	CT		33 days***	91%*	61%*	78%*	Improved	Ideal 100%.
	MRI		116 days***	73%*	47%*	34%*	Improved	
	Coronary artery bypass grafts (CABG)	Urgent	7 days**	90%**	95%**	99%**	Major improvement 2006–09 but stable over the past two years	
		Semi-urgent	22 days**					
		Elective	46 days**					
	Angiography	Urgent	3 days**	91%**	80%**	98%**		
		Semi-urgent	18 days**					
		Elective	23 days**					
	Percutaneous coronary intervention	Urgent	4 days**	93%**	87%**	98%**		
		Semi-urgent	16 days**					
		Elective	19 days**					
	Cancer surgery		60 days***	65%*	73%*	90%*		100% for all priority levels and surgeries (achieved by North York General Hospital).[21]
	General surgery		104 days***	83%*	89%*	96%*		
	Cataract surgery		123 days***	83%*	87%*	97%*	Improved 2006–09 but slight recent increase	
	Hip replacement		181 days***	67%*	67%*	86%*		
	Knee replacement		197 days***	63%*	60%*	81%*		
% of sicker adults who waited four weeks or more to see a specialist				47%†			n/a	7% (Switzerland) or 11% (USA).

Data source: *Cancer Care Ontario and Wait Times Information System – 2011; **Cardiac Care Network, November 2011; ***Cancer Care Ontario and Wait Times Information System – 2010/11 fiscal year; †Commonwealth Fund International Health Policy Survey of Sicker Adults, 2011

IDEAS FOR IMPROVEMENT	PATIENT	POLICY	PROVIDER
Treatment wait times and access to specialists:			
Measurement: Monitor wait lists for individual patients, especially those deemed high priority or who have already been waiting past the target time frame, to ensure they do not fall between the cracks. Closely monitor the incoming demand for procedures and the actual rate of services being provided; these should be balanced with each other.[22]			●
Processes: Implement **appropriateness criteria** to ensure only patients who need the surgery or procedure get it. Use **bed tracking systems and utilization management** to avoid situations where the hospital reaches full capacity. This is to prevent situations where cases are cancelled because a bed is not available that day.[23] **Avoid "batching"** of certain activities prior to the procedure. (For example, if a physician reviews certain information for incoming patients only once a week, then some patients experience a six-day delay).[24] Accelerate **sharing of diagnostic images** across Ontario so that CT, MRI scans do not need to be repeated because previous results cannot be accessed. Use **electronic referral systems** that ensure all relevant information is captured before a booking can proceed. Such systems can also eliminate delays in transmission of information. Establish **standard pre-operative routines** to ensure patients get all of their diagnostic tests and assessments done in a timely fashion before testing.[25] Conduct **"queue-clearing blitzes"** as needed. Even if the rate of new referrals for services is equal to the number of services being provided, a queue may exist due to past backlogs. Eliminating this backlog over a set period of time can reduce wait times dramatically.[26]			●
Patient engagement: Increase **health promotion and optimize chronic disease management** to avoid need for these services in the first place. This includes weight loss to prevent hip and knee replacements and smoking cessation, exercise, hypertension and diabetes control to avoid cardiovascular procedures and cancer surgeries. Ensure patients have **written instructions** and use **teach-back** to verify they understand how to prepare for the procedure, to avoid last-minute cancellation due to misunderstanding (see section 8).	●		●
Staff skills: Verify staff skills in implementing the above processes and ideas. For example, ensure those who book procedures are well trained to elicit all necessary information accurately at the time of booking, to avoid rework due to errors.			●
Incentives: Consider **reductions in payment** if a service performed does not meet appropriateness criteria or is a repeat of a test recently done elsewhere. Performance targets are already in place in **accountability agreements** in Ontario for many of these procedures; consider either strengthening the targets or intensifying the consequences for organizations that miss targets.		●	●
Capacity: If the incoming demand for procedures continuously outstrips the number of services being provided, and inappropriate demand has been eliminated, then **consider increasing capacity**.[27]		●	

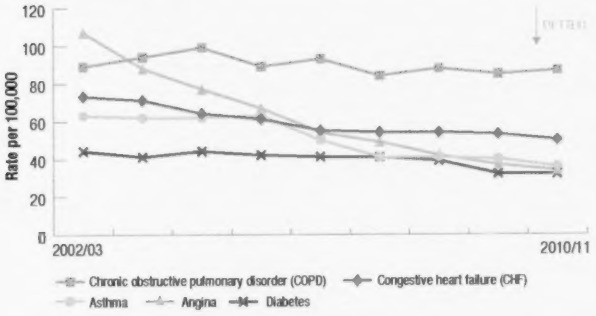
What is happening in Ontario?

- The MRI Process Improvement Project (MRI-PIP) helps MRI sites implement Lean process improvements, such as avoiding errors in the booking process, ensuring patients come to the test with proper preparation, optimizing staff schedules and eliminating paperwork. By March 2012, all MRI sites received training in this program. For details, visit www.mritoolkit.ca.
- The Ministry of Health and Long-Term Care (MOHLTC), in partnership with University Health Network and St. Joseph's Healthcare Hamilton, has developed an online CT and MRI decision-support tool. This system analyzes clinical information entered by the provider and rates the appropriateness of using an MRI or CT scan as a diagnostic in light of current evidence-based guidelines. The database contains approximately 1,000 clinical indications, such as MRI or CT scan appropriateness for the condition in question, the preferred technology, if further consultation with a radiologist is recommended or if there is no clinical evidence to support MRI or CT use.[28]
- Cancer Care Ontario has developed Diagnostic Assessment Programs (DAP) to be used from the beginning of the cancer journey, when there is suspicion that cancer is present, until diagnosis. DAPs are used to coordinate diagnostic services, provide information to patients and assist family doctors to access diagnostic tests, their results and patient information. DAPs aim to increase efficiency and decrease wait times, while improving patient experience.

3 | Potentially avoidable hospitalizations

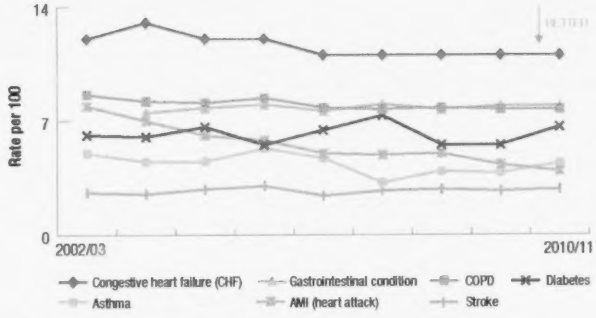
People with chronic diseases from time to time require hospitalization but, in many instances, the hospitalization could have been avoided. Ambulatory care sensitive conditions (ACSCs) are conditions where good primary care can greatly reduce the need for hospitalization.[29] Other avoidable hospitalizations include hospital readmissions, where patients return to hospital shortly after being discharged. Some of these readmissions could be avoided by ensuring patients have good follow-up care and understand discharge instructions.

HOSPITALIZATION RATES FOR AMBULATORY CARE SENSITIVE CONDITIONS



Over the past seven years, Ontario's rate of ambulatory care sensitive admissions has decreased steadily and is now lower than in most provinces. The most common conditions are CHF and chronic obstructive pulmonary disorder (COPD). There is still likely room to improve. Lower rates exist in BC and specific regions (e.g., Richmond BC, Central LHIN).

HOSPITAL READMISSION RATES FOR A SPECIFIC OR RELATED CONDITION WITHIN 28 DAYS



Readmissions are common. For CHF and COPD, about one in five patients is readmitted within a month. There has been little change in recent years, except for heart attack, where readmissions have dropped steadily. Ontario can do better; leading sites in the USA have achieved rates that are significantly lower than Ontario's.[30]

	INDICATOR	LATEST RESULT	PROGRESS?	WHERE COULD WE BE?
POTENTIALLY AVOIDABLE HOSPITALIZATIONS	Hospital admission rate per 100,000 population for:		Improved	For overall rate, 162 (Richmond, BC) or 182 (Central LHIN).
	– Overall (all ambulatory care sensitive conditions)	275*		
	– COPD (e.g., emphysema, chronic bronchitis)	87*		
	– CHF	50*		
	– Asthma	36*		
	– Angina	34*		
	– Diabetes	32*		
	Hospital readmission rates for a specific or related condition within 28 days for:		No change except for AMI (improved)	For AMI, 2.8% (Champlain LHIN).
	– CHF	11%*		
	– Gastrointestinal condition	7.9%*		
	– COPD	7.7%*		
	– Diabetes	6.6%*		
	– Asthma	4.4%*		
	– AMI (heart attack)	3.9%*		
	– Stroke	2.8%*		
	Readmissions within 30 days for any reason:		n/a	For CHF, < 10% at leading sites in USA.[30]
	– CHF (age ≥ 45)	23%**		
	– COPD (age ≥ 45)	19%**		
	– Gastrointestinal conditions (all ages)	16%**		
	– Diabetes (all ages)	14%**		
	– Cardiac conditions (age ≥ 40)	12%**		
	– Pneumonia (all ages)	13%**		
	– Stroke (age ≥ 45)	8.6%**		
	Hospital readmission rates for:		No change	As low as possible.
	– Depression	6.4%***		
	– Mental health and addictions	10.3%***		
	– Schizophrenia and bipolar disorder	11.7%***		
	Hospital readmission rates within 30 days per 100 episodes of acute care by LTC residents	14%*	n/a	As low as possible.

Data source: *DAD and RPD 2010/11, provided by ICES; **Discharge Abstract Database (DAD) 2010/11 provided by MOHLTC; ***Ontario Mental Health Reporting System (OMHRS), DAD, RPD, FY 2010/11, provided by ICES

IDEAS FOR IMPROVEMENT	PATIENT	POLICY	PROVIDER
Ambulatory care sensitive conditions:			
All change ideas for chronic disease management (CDM) (see section 3 – chronic disease management) can contribute to reducing avoidable hospitalizations.			
Readmissions:			
Measurement/feedback: Conduct **chart reviews** of readmitted patients to find preventable root causes of the readmission.[31] Report on readmission rates by individual hospital to spur improvement.[32]			●
Decision supports: Use standard orders and discharge checklists to make sure patients are on the right medications or treatments, or identify which patients need referrals to specialized services such as rehabilitation after discharge.[33]			●
Process: Employ **risk scoring** to identify those most likely to be readmitted, and direct them to more intensive follow-up (e.g., specialty or multidisciplinary clinics).[34] Ensure the patient has a **documented follow-up appointment** with family doctor, home care or specialists as needed.[35] Create processes to **identify patients at risk of readmission due to non-medical issues** (e.g., social isolation, lack of support, conflicts at home, lack of housing) and arrange social or community-based services.[36] Consider **nurse-managed drug titration protocols** for close monitoring and frequent adjustment of medications after discharge.[37] Implement **medication reconciliation** at discharge, to verify that the patient's list of drugs is the most accurate and up-to-date.[38] Work with home care to ensure **fall prevention** (e.g., safety bars, walkers) is in place at home.[39]			●
Resources: Consider use of **Telehomecare monitoring** (e.g., track blood pressure, symptoms, weight, heart rhythm etc. with remote devices), especially for those at highest risk.[40] Consider establishing **multidisciplinary clinics** for high-risk patients, such as CHF clinics or clinics for people with multiple conditions, where patients can receive more intensive adjustment of medications and counselling on lifestyle modification.[41]		●	
Patient engagement: Provide **written discharge instructions** in simple language, translated where possible.[42] Use **"teach-back"** method where staff ask patients to repeat back instructions to verify their understanding.[43]	●		●
Staff skills: Develop and verify skills among staff on key items above (e.g., use of teach-back, medication reconciliation, risk scoring, etc.).[44]			●
Incentives: Consider moving to **patient-based payment** for hospitalizations where hospitals receive set payment for hospitalization and related readmissions.[45] Set expectations for delivery of certain best practices in **accountability agreements, contracts or funding formulas** for healthcare providers.[46]		●	

What is happening in Ontario?

- **HQO resources for improvement:** In 2012/13, HQO will be providing webinars and other supports to hospitals and other organizations interested in reducing readmissions in their quality improvement plans.

  HQO is also conducting the Optimizing Chronic Disease Management in the Community project, aimed at evaluating the effectiveness and cost effectiveness of different interventions to reduce hospitalizations and improve disease management. It is also evaluating the evidence behind multidisciplinary community-based care models and is conducting a field analysis of CHF clinics. The information from these reviews will be used to help set standards for how these clinics deliver services.

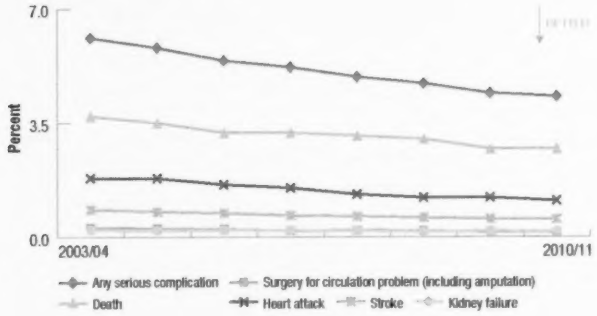
- BreathWorks, the Ontario Lung Association's COPD program, offers a help line that connects people with COPD to Certified Respiratory Educators, who can answer questions about symptoms, diagnosis, treatment and management. It also offers education materials, support groups and rehabilitation programs.

- eHealth Ontario is implementing ePrescribing across the province to electronically generate, authorize and transmit prescriptions between healthcare providers and pharmacists. This may improve access to patients' complete medication histories and clinically relevant information, and allow healthcare providers to share information.

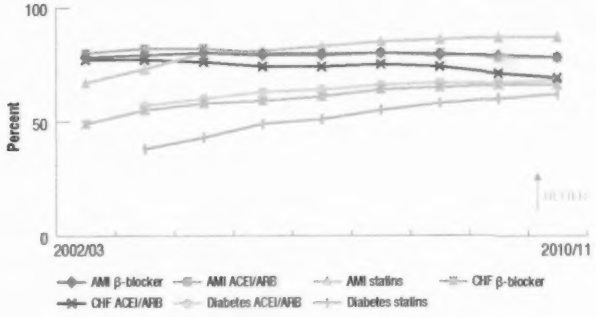
3 | Chronic disease management

Chronic diseases such as diabetes and congestive health failure are common, especially in the elderly. It is important that these individuals take recommended drugs, as these drugs can reduce symptoms and complications, such as heart attacks, strokes, hospitalizations and death. Frequent monitoring is also important to ensure that problems are identified and treated early, before they escalate. Also, proper management of a healthy lifestyle, along with these other measures, can improve quality of life and survival.[47]

% OF PEOPLE WITH DIABETES WITH A SERIOUS COMPLICATION IN THE PAST YEAR



% OF OLDER PATIENTS ON A DRUG RECOMMENDED FOR THEIR MEDICAL CONDITION



There are some positive signs of improvement in the management of chronic diseases. Complications arising from diabetes, such as heart attacks, strokes, amputations and kidney failure, are on the decline. The use of recommended medications, such as statins, ACEI/ARBs and beta-blockers, is generally rising, although slowly. However, there is still huge room for improvement. More people could be on these drugs, and many people with diabetes are not getting regular monitoring of their feet and eyes. Many people with chronic diseases still smoke, have poor diet and do not get enough exercise. Obesity rates for people with chronic diseases have risen, from 23% in 2003 to 27% in 2010.

INDICATOR			LATEST RESULT	PROGRESS?	WHERE COULD WE BE?
RECEIVING THE RIGHT DRUGS	% of elderly people on right drugs after hospitalization for CHF	– ACEI/ARB[Ø] – Beta-blocker	69%* 66%*	Worse Improved	Likely higher.
	% of elderly people on right drugs after hospitalization for AMI	– Statin – Beta-blocker – ACEI/ARB[Ø]	87%* 78%* 78%*	No change	90% (Canadian Cardiovascular Society target).[48]
	% of elderly people with diabetes on right drugs for diabetes in past year	– ACEI/ARB[Ø] – Statin	68%*** 62%***	Improved	Likely higher.
LIFESTYLE	Life style risk factors of people with chronic diseases: – Low fruit/vegetable consumption – Physical inactivity – Obesity – Smoking		 61%** 55%** 27%** 20%**	 No change No change Worse No change	As low as possible.
MONITORING	% of people with diabetes who in the past year had: – an eye exam – feet exam		 52%[¥] 61%[¥¥]	 No change n/a	81% (UK, feet exam).
CHRONIC DISEASE OUTCOMES	% of people with diabetes who had a serious complication in past year: – Any serious complication – Surgery for circulation problem (including amputation) – Death – Heart attack – Stroke – Kidney failure		 4.30%[†] 0.14%[†] 2.70%[†] 1.10%[†] 0.54 %[†] 0.17%[†]	 Steady improvement	As low as possible.

Data source: *RPDB, DAD, ODB, FY 2010/11, provided by ICES; **CCHS 2010, provided by ICES; ***ODB, ODD FY 2010/11, provided by ICES; [†]DAD, Ontario Health Insurance Plan (OHIP), Registered Persons Database (RPD) and Ontario Diabetes Database (ODD), FY 2010/11, provided by ICES; [¥]OHIP, ODD, RPD, FY 2010/11, provided by ICES, [¥¥]Commonwealth Fund International Health Policy Survey of Sicker Adults, 2011; [Ø]ACEI: angiotensin-converting-enzyme inhibitor, ARB: angiotensin receptor blocker

IDEAS FOR IMPROVEMENT	PATIENT	POLICY	PROVIDER
For lifestyle:			
Consider all measures for improving health behaviours (see section 9).			
For all:			
Measurement/ Feedback: Ensure EMRs have **chronic disease flowsheets** and can track key indicators and provide feedback results to practitioners. Develop **provincial disease registries** that can feed back to individual physicians or providers how well they are managing their patients compared to their peers.		●	●
Decision supports: Build features into **EMRs to remind** providers about which drugs to use and when, warn about dangerous drug interactions, or alert them when a patient is overdue for follow-up or whether specialized services (e.g., rehabilitation or surgery) should be recommended.[49]			●
Processes: Implement **advanced access** so chronic disease patients can be seen in a timely manner (see section 2 – treatment wait times and access to specialists). Have a well-organized, **structured clinic visit** for patients with chronic disease, where all important issues are systematically reviewed and discussed. Use all members of the healthcare team to ensure all these issues are addressed.[50] Have a **recall system** in the clinic so that patients who are overdue for a visit or lab test are routinely notified.[51] Consider **standard protocols for adjusting medications** frequently based on measurements, for difficult-to-manage patients, that nurses, home care providers or patients can administer.[52] Consider **implementing risk criteria** to identify patients at highest risk of getting worse or needing hospitalization. Refer these individuals to a more comprehensive level of care (e.g., specialty or interdisciplinary clinic).[53] Pharmacists and other healthcare providers should work together.[54]			●
Resources: Consider Telehomecare monitoring for selected high-risk patients.[55] Consider establishing **multidisciplinary clinics** for high-risk patients, such as CHF clinics or clinics for people with multiple conditions, where patients can receive more intensive adjustment of medications and counselling on lifestyle modification.			●
Patient engagement: Implement patient self-management where patients set their own goals and build on their successes. Provide this support to patients using staff specially trained in this technique.[56] Ensure patients have up-to-date versions of their **care plans**, with information about diagnosis, medications, regular tests, treatment goals and who to call if they experience problems.[57]	●		●
Skills development: Develop staff skills to implement patient self-management programs.[58]			●
Incentives: Consider including measures of good chronic disease management in future **accountability agreements or contracts** with primary care providers.[59] Consider **establishing practice standards** for good chronic disease management (e.g., mandating the use of flow sheets and recall processes), to be used in quality assurance programs.[60] Strengthen **EMR vendor specifications** so that any EMR software company operating in Ontario must be able to provide the desired functions described above (i.e., track indicators, provide reminders, etc.).[61]		●	

What is happening in Ontario?

- **HQO resources for improvement:** HQO, through one of its predecessors, the Quality Improvement and Innovation Partnership, has been providing coaching support and learning collaboratives to primary care practices for the past four years. Participants apply quality improvement tools such as process maps and Plan-Do-Study-Act cycles to implement many of the above ideas. From 2008 to 2010, Family Health Teams and selected community health centres worked on diabetes, advanced access and colorectal screening. In 2011, 129 teams enrolled in wave 1 of a learning community worked on diabetes, asthma, COPD, hypertension and cancer screening. For 2012 and beyond, new primary care teams enrolling in HQO's support activities will work on advanced access and chronic disease management.

  HQO, through the work of the Ontario Health Technology Advisory Committee (OHTAC), has identified several surgical interventions that have good outcomes for people with chronic conditions, such as bariatric surgery for morbidly obese persons[62] and endocardial ablation for atrial fibrillation.[63] At the same time, OHTAC has recommended against the use of continuous glucose monitoring combined with self monitoring of blood glucose for the management of insulin-dependent diabetes.[64]

  HQO is currently advocating for more stringent EMR vendor specifications to ensure that chronic disease flowsheets and tracking of indicators are standard features.

- The MOHLTC, through the Ontario Diabetes Strategy is implementing the Diabetes Registry. Healthcare providers will be able to access patient records, diagnostic information and lab results for kidney function, cholesterol and blood sugar, and view patient alerts.

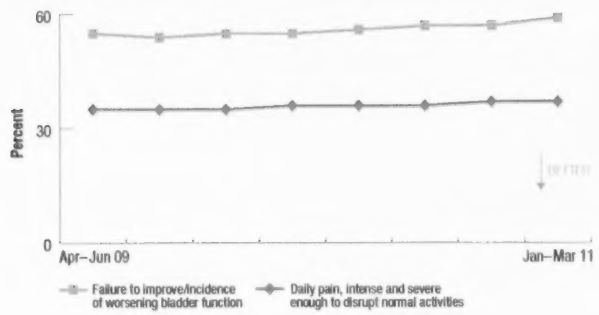
- The Quality in Family Practice project, based at McMaster University, has developed a comprehensive book of quality indicators and assessment criteria that primary care teams can use to audit themselves. The criteria cover use of the right drugs and tests for chronic disease management, promotion of a healthy lifestyle, continuity of care, office organization and other topics. See www.qualityinfamilypractice.com.

- Ontario's MedsCheck program, launched in 2007, offers certain patients an annual consultation with a community pharmacist to help them better understand their drugs and how to take them. It is available for free for people with diabetes, people on three or more drugs for chronic conditions and LTC residents.[65] It is also provided at home for those who cannot get to their local pharmacy.[66]

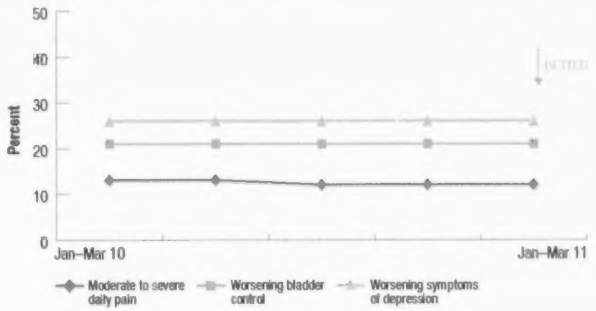
3 | Keeping people healthy in home care, long-term care and complex continuing care

Home care (HC), long-term care (LTC) homes and complex continuing care (CCC) units in hospitals provide specialized nursing, personal support, rehabilitation and medical services for frail persons with major limitations in their ability to function. It is important that healthcare providers in these settings implement known best practices for helping these people maintain their mobility, preserve bladder control, reduce pain and avoid depression.[67] Failure to do so may result in needless suffering, physical and emotional decline and loss of independence.

KEEPING HOME CARE CLIENTS HEALTHY



KEEPING LONG-TERM CARE RESIDENTS HEALTHY



Conditions such as incontinence and uncontrolled pain are common problems among frail persons in LTC and HC settings. Over the past two years, there has been little change in these conditions among LTC residents, and a modest increase among HC clients. These conditions cannot be eliminated entirely, as they tend to naturally worsen over time as chronic diseases progress. However, there are still opportunities to improve, through the implementation of a variety of best practices.

INDICATOR		LATEST RESULT	PROGRESS?	WHERE COULD WE BE?
KEEPING CLIENTS HEALTHY IN HC	% of HC clients whose bladder function has recently decreased/did not improve compared to previous assessment	58%*	Worse	As low as possible.
	% of HC clients having daily, intense pain or with pain severe enough to disrupt normal activities	36%*	Worse	As low as possible.
KEEPING RESIDENTS HEALTHY IN LTC AND CCC	% of LTC residents with: – Worsening bladder control – Moderate to severe pain – Worsening symptoms of depression	 20%** 12%** 26%**	No change	As low as possible.
	% of CCC residents with: – Worsening bladder control – Moderate to severe pain – Worsening symptoms of depression	 15%** 21%** 17%**	n/a	As low as possible.

Data source: *HCRS FY 2010/11, provided by CIHI; **CCRS FY2010/11, provided by CIHI

IDEAS FOR IMPROVEMENT	PATIENT	POLICY	PROVIDER
Best clinical practices for avoiding incontinence[68]:			
Implement prompted voiding and bladder training where staff help residents go to the bathroom on regular, individualized schedules; consider certain medications to reduce incontinence; encourage Kegel exercises to strengthen pelvis; avoid caffeine, alcohol, excessive fluid intake; avoid restraints (section 4); rule out bladder infection; ensure commode or bathroom nearby; consider surgery for incontinence (see below).			●
Best clinical practices for pain management[69]:			
Monitor pain as the fifth vital sign; recognize pain signs in persons who cannot communicate; maximize use of non-addictive drugs for pain (e.g., acetominophen, nortriptyline, gabapentin); consider acupuncture, physiotherapy.			●
Best practices for depression:			
Ensure adequate choice and frequency of activities,[70] both within LTC homes and in the community (e.g., day programs);[71] encourage visits from family, friends; consider pet therapy; encourage physical activity/exercise; screen for depression; consider treatment with anti-depressants.	●		●
Ideas for implementation:			
Process Improvement: Develop a standard process for implementing prompted voiding. Develop a process for routinely applying **appropriateness criteria for incontinence surgery** to identify potential candidates. Incorporate **pain assessment** in regular assessments.[72] Develop a **standard narcotics protocol** for administration of these pain drugs.		●	●
Capacity: Establish **exercise programs** for community-dwelling elderly. Ensure there is an adequate supply of **adult day programs** or other community-based activities that offer social interaction to combat social isolation and prevent cognitive decline. Consider **nurse continence advisors** or **community-based incontinence clinics** that offer multi-modal behavioural interventions.		●	●
Skills Development: Train staff to use pain assessment tools that have been validated for older adults and people with cognitive impairments, such as dementia.[73,74] **Provide educational opportunities to personal support workers** (PSWs) about the early signs of dementia or cognitive decline. Encourage PSWs to complete the Personal Support Worker Dementia Certificate.[75]			●
Patient Engagement: Engage individuals and their families in taking steps to improve the above problems. These include limiting caffeine, alcohol and excessive fluids; obtaining buy-in to using prompted voiding schedules; encouraging participation in exercise and organized activities; encouraging regular family visits; and discouraging use of restraints (which are sometimes requested by family members).	●		●

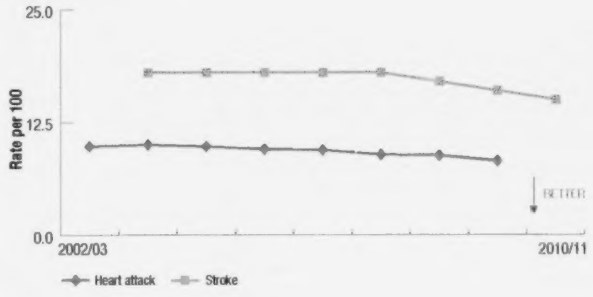
What is happening in Ontario?

- **HQO resources for improvement:** The Residents First campaign, supported by HQO, provides tools, coaching and learning collaborative sessions where LTC homes can learn how to implement the above ideas. See www.residentsfirst.ca for specific tools for incontinence.
- For more details on the evidence behind the above interventions, see OHTAC Recommendation on *Aging in the Community (2008)*[76] on HQO's website. According to this analysis, exercise programs have a very favourable cost-effectiveness ratio and should be a high priority for implementation. Incontinence clinics and continence advisors are also recommended. OHTAC also recommends mid-urethral sling surgery for incontinence for certain patients, which is a simple day procedure.[77]
- The Integrated Client Care Project (ICCP) is a project sponsored by the Ministry, Ontario Association of Community Care Access Centres and Rotman Collaborative for Health Sector Strategy in partnership with Ontario's LHINs, and other groups. The project is working with CCAC sites and cross-sector LHIN-based teams to streamline and integrate home and community care services.[78] HQO has provided quality improvement coaching and measurement support to help identify the most efficient and client-centred process for delivering wound care and palliative care, removing irritants for clients such as needless wait for service, redundant assessments, or confusion about who to contact for help. A major cause of fragmented services under the current model is that different care providers typically work for different contractors and that fee for service is based on a per visit or per hourly rate. ICCP is testing a reform of the funding model where one organization is accountable for all the services that an individual needs and compensation is based on outcomes.[79]
- Several regions in Ontario have implemented community-based nursing consultation services for palliative pain and symptom management.[80,81,82,83,84] Funded by the Ministry, these services respond to requests from LTC homes and other community care providers and offer expert consultation and training on how to assess and manage pain or palliative symptoms.

4 | Hospital infections, adverse events and mortality in acute care hospitals

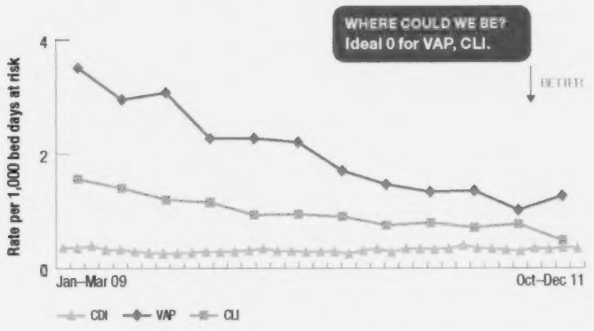
Hospitals aim to provide patients with timely service, successful recovery from medical conditions and a positive experience. However, their most critical function is to save lives. Hospitals aim to provide appropriate treatments reliably in complex, challenging situations and avoid medical errors that can lead to needless deaths. Hospital-acquired infections (HAIs) and adverse events such as falls or pressure ulcers may result in pain and suffering, disability, prolonged hospital stays, more surgery, negative long-term health effects or death.[85] These events cause stress and burden to patients and families[86] and add to hospital costs.[87]

MORTALITY RATE AFTER HOSPITALIZATION FOR HEART ATTACK AND STROKE



Hospital mortality is decreasing. Most hospitals saw a decrease in the past year in their hospital standardized mortality ratio, which examines deaths for the most common conditions for which people come to hospital. Specifically, there have been impressive and steady reductions in deaths after heart attack and stroke. There is very likely room to continue to reduce mortality further. Other opportunities include reducing deaths from sepsis, blood clots, drug errors or poor communication.

HOSPITAL-ACQUIRED INFECTION RATE



Ontario has made progress in hospital-acquired infections. Hand hygiene in hospitals has improved in the past three years, from 53% to 72%. Ventilator-associated pneumonias (VAP) and central line infections (CLI) are decreasing steadily, thanks in part to the Safer Healthcare Now! and "Just Clean Your Hands" campaigns. There is still room to improve; hand hygiene rates should aim towards 100% and VAP and CLI towards zero. Unfortunately, *C. difficile* rates have increased slightly in the past year, reversing gains made in previous years. Hospitals must continue to be vigilant about infection control procedures.

INDICATOR		LATEST RESULT	PROGRESS?	WHERE COULD WE BE?
HOSPITAL INFECTIONS	Hand hygiene compliance in hospitals before and after patient contact: – Overall (before) – Overall (after)	 72%* 83%*	Improved	100% (ideal); leading hospitals in Ontario currently at 92%.*
	Hospital-acquired *C. difficile* infection (CDI) rate per 1,000 patient days	0.35*	Slightly worse	As low as possible.
	Ventilator-associated pneumonia (VAP) rate per 1,000 ventilator days	1.26*	Major improvement	Zero (achieved in several Ontario hospitals).*
	Central line infection (CLI) rate per 1,000 central line days	0.48*		
ADVERSE EVENTS IN HOSPITALS	Rates of adverse events per 1,000 medical/surgical patients in hospital: – Pressure ulcer – Fracture	 2.5** 0.7**	No change	As low as possible.
MORTALITY IN HOSPITALS	Risk-adjusted rate of death within 30 days per 100 patients admitted for heart attack	8.2***	Improved	As low as possible.
	Risk-adjusted in-hospital rate of death within 30 days per 100 patients admitted for stroke	15**	Improved	
	% of reportable hospitals whose hospital-standardized mortality rate (HSMR) has decreased compared to the previous year	68%**	Improved	

Data source: *MOHLTC www.ontario.ca/patientsafety. C. difficile – January 2012, VAP and CLI – October–December 2011, hand hygiene – FY 2010/11; **DAD, FY 2010/11, provided by CIHI; ***DAD, RPD, FY 2009/10, provided by ICES

IDEAS FOR IMPROVEMENT	PATIENT	POLICY	PROVIDER
Specific best practices for hospital infections:			
Ventilator-associated pneumonia: Elevate head of bed 60 degrees, give daily sedation break to test if ready to extubate, drugs to prevent ulcers and blood clots, daily oral care with chlorhexidine.[88]			
Central line infection: Maximum barrier precautions (mask, gloves, drapes), clean skin with chlorhexidine, check site daily for infection, remove line as soon as possible.[89]			●
C. difficile: Disinfect surfaces with virox, signage indicating the precautions, appropriate personal protective equipment (full gown and gloves), effective antibiotic stewardship.[90]			
Specific best practices for reducing mortality:			
Sepsis: Measure serum lactate, check blood cultures before antibiotics, give antibiotics without delay, treat low blood pressure aggressively with intravenous fluids and vasopressor drugs.[91]			
Venous thromboembolism: Identify patients at risk for blood clot and give blood thinners.[92]			
Surgical complications: Give antibiotics just before surgery and blood thinners to prevent clots; remove hair with clippers; maintain normal temperature, blood sugar; continue beta-blockers if previously taken; use surgical checklist.[93]			●
Medication safety: Medication reconciliation; unit dosing; use pre-mixed or pharmacy-prepared IV solutions; consider computerized order entry and bar coding of the medication administration process.[94]			
Implementation ideas for all:			
Measurement/feedback: Measure indicators continuously (e.g., monitor hand hygiene monthly or weekly if needed).[95] Consider a more detailed **audit of compliance with best practices** for VAP, CLI, *C. diff*, sepsis, etc. if these rates are too high.[96] Provide feedback: **post results by unit**, provider type or individual if necessary.		●	●
Decision support: Use **checklists and standard orders** for any of the above bundles.		●	
Processes: Develop **standard process maps** to ensure key best practices in each bundle above happen consistently and in the right order. Identify who is responsible for each process. For hand hygiene, use **disinfectant with moisturizer** to prevent non-compliance with hand hygiene due to chapped hands.[97,98] Have a process for checking if alcohol dispensers for hand hygiene are empty.[99] For drug safety, use **standard protocols for high-alert medications**.			●
Staff skills: Maintain a **closed ICU** (only ICU specialists work in ICU).[100] Observe staff to **verify skills** — everything from use of sterile technique by physicians and nurses to proper technique for cleaning rooms by housekeeping.[101] In particular, **verify skills of new hires** or trainees. Consider verifying hand hygiene skills — have staff coat hands with fluorescent powder, wash hands and see unwashed areas under a black lamp.[102]		●	●
Patient engagement: Ensure **full disclosure of any adverse events** to patients and families.[103] **Encourage patients to ask questions** and raise concerns. Invite patients to ask their healthcare providers if they have washed their hands.[104]			●
Incentives: Create a **culture of safety**, with consistent, **repeated messages from leadership** about patient safety.[105] **Celebrate improvements** or sustained success. Consider sanctions for intentional refusal by staff to comply.[106] Use **positive deviance** technique — identify those who have achieved success when others have failed, celebrate success and aim to repeat it elsewhere.[107]			●

What is happening in Ontario?

- **HQO resources for improvement:** *The Excellent Care for All Act* (2010) legislates that hospitals develop an annual Quality Improvement Plan (QIP) that addresses critical incidents. See HQO's publication, *2011 Quality Improvement Plans: An Analysis for Learning,*[108] for suggestions on how to structure these plans effectively and examples of stretch goals for improvement in hospital infections and mortality that leading hospitals set in their plans.

  HQO is currently developing evidence-based recommendations on safe practices for multiple IV infusions to prevent errors.

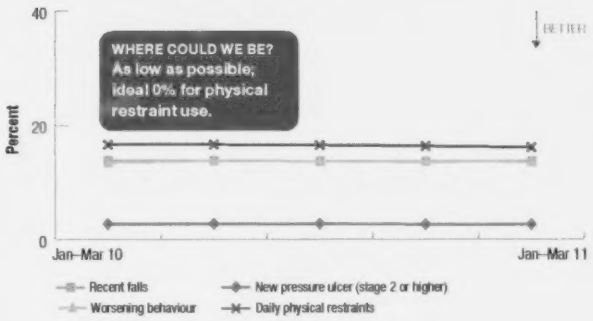
- Safer Healthcare Now! is a program of the Canadian Patient Safety Institute that provides Canadian care bundles for VAP, CLI, medication reconciliation, venous thromboembolism, falls reduction, optimized care for heart attacks and others. In Ontario, more than 500 healthcare teams from 161 organizations have enrolled.

- A Ministry directive requires all hospitals to report all critical incidents related to medication/ IV fluids as of October 1, 2011 within 30 days following the disclosure of the critical incident to the Medical Advisory Committee (MAC), administrator and/or patient.

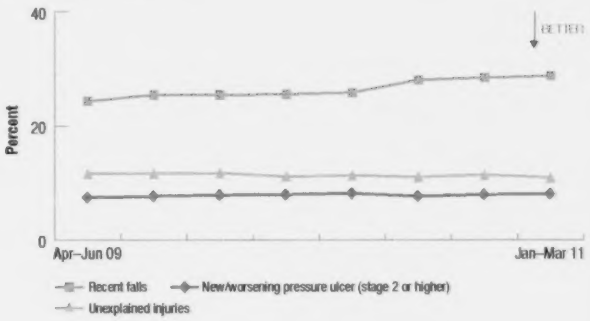
4 | Minimizing risks in long-term care, complex continuing care and home care

People who receive home care (HC), long-term care (LTC), or complex continuing care (CCC) often have complex health conditions that put them at higher risk of problems like pressure ulcers and falls that cause injury. These are serious events that can lead to decreased mobility, reduced quality of life and hospitalization.[109] Many of these individuals also have dementia and related behavioural problems like aggression or wandering, which can contribute to safety hazards. It is important for healthcare workers to implement different best practices to avoid these problems or manage them better. Physical restraints should be avoided because they can lead to injury and have negative psychological effects.

FALLS, PRESSURE ULCERS, WORSENING BEHAVIOURS AND RESTRAINT USE IN LONG-TERM CARE HOMES



FALLS, PRESSURE ULCERS AND UNEXPLAINED INJURIES IN HOME CARE CLIENTS



Falls, pressure ulcers, behavioural problems and restraint use continue to be common problems in LTC homes and among HC clients. There has been little or no change in these areas in the past year. Although there are no specific benchmarks available yet for these conditions, there is very likely major room to improve. For restraint use, there is definitely room to improve, as leading sites have reduced this to zero.

INDICATOR		LATEST RESULT	PROGRESS?	WHERE COULD WE BE?
MINIMIZING RISKS IN LTC AND CCC	% of LTC residents who had a fall in the last 30 days	14%*	No change	As low as possible while preserving mobility.
	Rate of falls among LTC senior residents per 100 resident years resulting in an emergency department visit	8.8%**		
	% of LTC residents with a new pressure ulcer (stage 2 or higher)	2.6%*		As low as possible.
	% of residents who had a pressure ulcer that recently got worse	2.8%*		
	% of LTC residents whose behaviour has recently worsened	14%*		
	% of LTC residents who were physically restrained	16%*		Close to zero %.
	% of CCC residents who do not have a recent prior history of falling, but fell in the last 90 days	10%*	n/a	As low as possible.
	% of CCC residents on antipsychotic medication for no clear reason	32%*		
MINIMIZING RISKS IN HC	% of HC clients who report that they have fallen in the last 90 days	28%***	Slightly worse	As low as possible.
	% of HC clients with a new pressure ulcer (stages 2 to 4) or an ulcer that failed to improve	7.9%***	No change	
	% of HC clients with unexplained injuries, burns or fractures	11%***	No change	

Data source: *CCRS, FY 2010/11, provided by CIHI; **NACRS, OHIP, RAI-MDS Jan-March 2011, provided by ICES; ***HCRS, FY 2010/11, provided by CIHI

IDEAS FOR IMPROVEMENT	PATIENT	POLICY	PROVIDER
Specific best practices for reducing falls[110]:			
Conduct risk assessment; provide physiotherapy, rehabilitation or exercise to improve lower limb strength and balance; use assistive devices, such as canes, walkers or grab bars; use hip protectors;[111] do not use bed rails; test for and correct visual problems (glasses or surgery); remove trip hazards and clutter; ensure good lighting; avoid incontinence so people do not fall when rushing to the washroom; ensure vitamin D and calcium supplementation; screen for and treat osteoporosis; avoid or wean persons off medications that can cause dizziness and lead to falls (e.g., benzodiazepines).			●
Specific best practices for preventing and treating pressure ulcers[112,113]:			
Conduct risk assessment; use pressure-relieving mattresses for those at high risk; have staff regularly check for early stage 1 ulcers; have staff turn high-risk, immobile persons every two hours; ensure good nutrition; avoid incontinence (see section 3); use a standard protocol for treating ulcers when they happen.		●	●
Specific best practices for addressing behavioural problems to avoid use of drugs or restraints:			
Use de-escalation protocols for aggressive behaviour; use simple commands and good eye contact to avoid frustration; use motion sensors to identify when someone is wandering; provide social activities, frequent visits to prevent social isolation; recognize pain in people who cannot communicate, which can cause difficult behaviours; consider pet therapy, touch therapy, music programs and aromatherapy.[114]			●
Implementation ideas for all:			
Processes: Incorporate **risk assessments** into standard orders. Develop **standard routines** to regularly check for hazards (clutter, poor lighting, unsafe shoes, etc.). If person is being transferred (e.g., to an emergency department), ensure **good communication** about the person's risk level for an ulcer or fall. Carry out **medication reviews** periodically and after transfers to ensure antipsychotic drugs are not given unnecessarily. Use a repositioning schedule and **visual reminders** to ensure persons at risk are turned regularly.[115]			●
Measurement/feedback: Post rates of these events by LTC home or floor. Use EMRs to give feedback **to individual doctors** on their prescribing patterns.[116]			●
Skills development: Verify staff skills with pain recognition, de-escalation, early ulcer detection, etc.			●
Engage healthcare user/families: Train clients/residents and families how to identify early pressure ulcers. Help individuals address feelings of shame or inadequacy that may prevent them from using canes or walkers when needed. **Engage families** in discussions about use of antipsychotic drugs for dementia and behavioural issues. **Discuss risks** associated with restraints so that family members will not ask for them.	●		●
Incentives and funding: Provide pressure-relieving mattresses to people at high risk. This requires **changes to current funding mechanisms** where funding for mattress in LTC homes is provided only after an ulcer occurs, not before.		●	

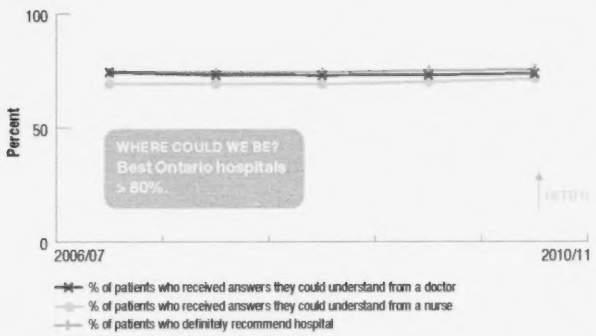
What is happening in Ontario?

- **HQO resources for improvement:** Residents First is an Ontario initiative designed to support LTC homes in providing an environment for their residents that enhances their quality of life. Specific topics for improvement include falls, pressure ulcers and responsive behaviours. Participating homes receive structured quality improvement training, access to quality improvement and change packages that describe best practices and implementation tips. Visit www.residentsfirst.ca.
- For more details on the scientific evidence behind the above recommended best practices, see OHTAC Recommendation Reports for Aging in the Community (2008),[117] pressure ulcer prevention (2009),[118] falls prevention (2008) and the Falls/Fractures Economic Model in Ontario's Residents (2008),[119] on HQO's website.
- The Registered Nurses Association of Ontario has published best practice guidelines for falls and pressure ulcer prevention, which identify evidence-based nursing practices and include practical tools and resources for implementation.[120,121]
- The Integrated Provincial Falls Prevention Project was initiated as a LHIN priority project in November 2010. As part of this project, the Integrated Provincial Falls Prevention Mobilization Committee was established to bring together the LHINs, Public Health Units and other organizations to formulate an "Integrated Falls Prevention Framework and Toolkit" that will assist in effectively reducing falls and the impact on seniors across the province.[122]
- The Integrated Client Care Project (ICCP) is a project co-sponsored by the MOHLTC, Ontario Association of Community Care Access Centres, and Rotman Collaborative for Health Sector Strategy. ICCP is a population-based model that is identifying and testing changes to home and community funding and delivery models to achieve greater value and outcomes for Ontarians.

5 | Patient experience in acute care hospitals, emergency departments and non-institutional care

Patient experience is one of the fundamental attributes of quality. Whether as one of the one million discharges from hospitals,[123] or five million visits to EDs[124] or users of primary care, a good experience and good communication increases patients' understanding of their condition and the likelihood of their following through with recommended treatments.[125]

PATIENT EXPERIENCE IN HOSPITALS


100
50
0
Percent
2006/07
2010/11
WHERE COULD WE BE?
Best Ontario hospitals > 80%.
% of patients who received answers they could understand from a doctor
% of patients who received answers they could understand from a nurse
% of patients who definitely recommend hospital

% OF SICKER ADULTS WHO RATE THEIR OVERALL QUALITY OF MEDICAL CARE IN THE PAST 12 MONTHS AS EXCELLENT OR VERY GOOD

There are major areas for improving patient experience around communication, engagement in decisions and coordination of care. About one in three hospital patients does not get answers to questions that they can understand. About one in four sicker adults does not get to ask enough questions or feels involved in decisions about care. About one in three sicker adults does not believe someone always coordinates the care they receive from other doctors or places. For hospital care, there has been little change in patient experience scores over time. Addressing these areas is critical to improving overall ratings of satisfaction and experience.

INDICATOR		LATEST RESULT	PROGRESS?	WHERE COULD WE BE?
PATIENT EXPERIENCE IN ACUTE CARE HOSPITALS AND EDs	% of patients who would definitely recommend their hospital to friends and family:			85–90% – Leading Ontario and American Hospitals[126]
	– Hospital	73%**	Worse	75%–84% – Leading Ontario EDs.†
	– ED	58%**	No change	
	% of patients who thought the staff did everything they could to help control their pain:			
	– Hospital	78%**	No change	As high as possible.
	– ED	52%**		
	% of patients who received answers they could understand when they asked important questions to:			
	– A nurse in hospital	71%**	Improved	Some Ontario hospitals have percentages above 80%.†
	– A nurse in ED	67%**	Improved	
	– A doctor in hospital	74%**	No change	
	– A doctor in ED	71%**	Improved	
	% of patients who were able to understand explanations about test results:			
	– Hospital	70%**	No change	
	– ED	66%**	No change	
EXPERIENCE IN NON-INSTITUTIONAL CARE	% of sicker adults who rate the overall quality of medical care they received in the past 12 months as excellent or very good	60%*	n/a	UK has the best result at 81%.
	% of sicker adults who received care from specialists or consultants, who stated that these providers always/often:			
	– give opportunity to ask questions	77%*	n/a	Switzerland's results: 92%, 92% and 85%, respectively.
	– tell about treatment choices	71%*	n/a	
	– involve them in decisions about treatment or care	77%*	n/a	
	% of sicker adults who have a regular doctor or place of care who said that someone in their doctor's practice always/often helps coordinate the care they receive from other doctors and places, such as making appointments	65%*	n/a	As high as possible.

Data source: *Commonwealth Fund International Health Policy Survey of Sicker Adults, 2011; **NRC-Picker patient satisfaction surveys, provided by the Ontario Hospital Association, FY 2010/11; †Based on OHA data, FY 2010/11, sourced from NRC-Picker patient satisfaction survey data

IDEAS FOR IMPROVEMENT	PATIENT	POLICY	PROVIDER
For all:			
Measurement: Conduct regular patient experience **surveys with continuous sampling** throughout the year.[127] Provide **continuous feedback to individual hospital units** of patient experience survey data.[128] Implement **pain scale monitoring** to track how well an organization is managing pain. Use visual analogue scales or pain face scales to identify pain in people who are unable communicate.[129,130]		●	●
Training: Provide **customer service training** — reinforce basic skills around proper greetings, eye contact, use of simplified language, de-escalating conflicts, active listening, allowing time for patients to absorb information. Observe staff to verify these skills are being used.[131] Provide **cultural competency** training.[132]			●
Decision supports: Use **standard orders for pain control**.[133] Use **checklists** to ensure all issues to communicate with patient are attended to.[134]			●
Processes: Implement **Lean process improvement** activities to reduce wasted staff time (e.g., time spent searching for things, unnecessary travel, fixing errors, excessive paperwork) and increase time for communication with patients or speed up response time to patient requests.[135] Use **patient-controlled analgesia pumps** where patients can adjust pain medication dose within a prescribed range.[136] Offer **expanded food choices** and cater to major local ethnic groups.[137] **Involve patients in design** and improvement of hospital processes.[138]	●		●
Patient engagement: Encourage patients to participate in **self-management** by setting their own action or treatment goals.[139] **Encourage patients to ask questions** about their treatment or raise concerns about safety,[140] such as through the "It's Safe To Ask" campaign (sponsored by Manitoba Institute for Patient Safety). Use **standardized patient decision tools** (with text, video materials) that list pros and cons of different treatment options,[141] such as Cancer Care Ontario's (CCO) "Cancer Testing: Your Options. Your Choice". Provide patients with **written discharge instructions** and frequently-asked questions (FAQ) sheets.[142] Use **"teach back"**, where staff verify that patients understand instructions by asking them to repeat them back.[143] Use **simple language or graphical displays** to explain instructions to those with low literacy.[144] Use a **"nothing about me without me"** approach. This is done in leading hospitals where they conduct rounds and discuss treatment issues in front of the patient and/or family.[145] Use **white boards in patient rooms** to always keep patients informed about who is looking after them, upcoming tests, expected discharge date, or other information.[146] Keep patients informed about the cause of delay and expected resolution.[147]	●		●
Incentives: Consider setting targets for improving patient experience in **accountability agreements**.[148] **Consider setting standards of care** for patient experience. For example, written discharge instructions for certain patients are an accreditation standard in the USA.[149]		●	

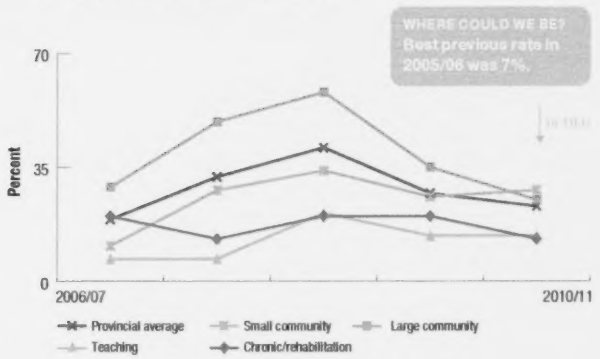
What is happening in Ontario?

- **HQO resources for improvement:** The *Excellent Care for All Act* (2010) requires every hospital to have a patient relations process that reflects the content of their patient declaration of values. In addition, hospitals are to conduct annual patient/caregiver experience surveys and make reference to both the patient relations process and the results from the survey(s) in the development of their annual Quality Improvement Plan to address patient experience issues, conduct patient experience surveys and submit annual quality plans. Currently, all hospitals are requested to include at least one core indicator from each of the quality dimensions, including patient centred. HQO's publication, *2011 Quality Improvement Plans: An Analysis for Learning*, describes examples of the best plans submitted by hospitals in 2011 for patient experience and pain management.
- "Testing for Cancer: My Options. My Choice", a Cancer Care Ontario initiative, is intended for average-risk and healthy individuals to detect disease at its earliest stages and to improve chances for successful treatment. As a result of this initiative, Ontarians have access to information about tests available right now for screening options, as well as investigation options for those showing signs and symptoms. Additionally, residents of Ontario are informed how certain factors such as age and gender may or may not make a test right for a certain individual.

6 | Cost of service delivery, right service in the right place and avoidable emergency department visits

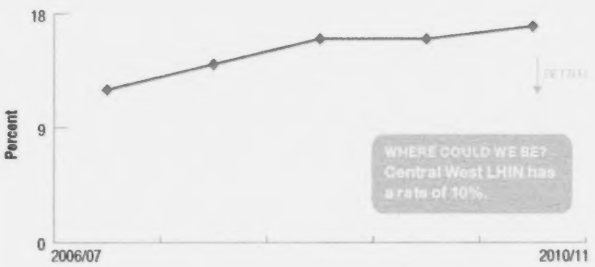
In the face of growing healthcare demands and fiscal constraints, Ontario's healthcare system must operate as efficiently as possible. This means continually looking for ways to improve practices, reduce waste and achieve best value for money. As the largest share of public healthcare expenditures, hospital operating costs need to be managed with financial sustainability in mind[150] so that, rather than paying down deficits, taxpayer funds can be spent in ways that improve patient care.[151] It is also important that Ontarians receive the right healthcare services in the right place. Conditions that require acute, specialized attention should be treated in the hospital, while those that can be managed in a primary care setting should be addressed in the community. 'Alternate level of care' (ALC) patients, who don't need hospital-level care but remain hospitalized because of a lack of home and community care options, are at a higher risk of further deterioration, sometimes to the point that long-term care becomes their only option.[152] Similarly, when patients visit the ED for preventable problems or because primary care options aren't available, they can experience confusion, distress and gaps in care.[153,154] Together, these issues lead to increased wait times, higher costs of care and more inconvenience to patients.

% OF HOSPITALS RUNNING A DEFICIT



Across the province, almost one in four hospitals reported a deficit in FY 2010/11. Over the last year the average deficit size has decreased by 15%. The largest decrease has been seen in large community hospitals, whose deficits decreased by one-third in the past year. Ideally, it would be better if hospitals could avoid deficits altogether.

% OF HOSPITAL BED DAYS DESIGNATED AS ALTERNATE LEVEL OF CARE (ALC)



One in six hospital bed days in Ontario is used for people designated as ALC. This problem has worsened in the past five years, despite recent investments in the provincial Aging at Home strategy. Many of these people are waiting for a LTC bed while in hospital. At the same time, nearly 20% of home care clients placed into LTC homes could have stayed home or been placed elsewhere in the community. Ensuring alternative care options exist is critical for reducing ALC bed days.

INDICATOR		LATEST RESULT	PROGRESS?	WHERE COULD WE BE?
COST OF SERVICE DELIVERY	% of hospitals running a deficit: – Province – Small community – Large community – Teaching – Chronic/rehabilitation	 23%* 28%* 25%* 14%* 13%*	Improved	Ideal 0%; best previous rate in 2005/06 was 7% for teaching hospitals, 11% for small community hospitals.
RIGHT SERVICE IN THE RIGHT PLACE	% of hospital bed days designated as alternate level of care (ALC)	17%**	Worse	10% (Central West LHIN).
	% of home care clients placed in LTC who could have stayed home or somewhere else in the community	19%***	Improved	No benchmarks available yet but could be lower.
AVOIDABLE ED VISITS	Number of emergency department visits due to an ambulatory care sensitive condition (ACSCs) per 100 LTC residents per year	5.6†	n/a	No benchmarks available yet but could be lower.
	% of sicker adults who went to the hospital emergency room for a condition that they thought could have been treated by their regular doctor if he or she had been available	37%††	n/a	16% (UK).

Data source: *Provided by MOHLTC, FY 2010/11, calculated by HQO; **DAD, FY 2010/11, provided by MOHLTC and CCO; ***Based on the MAPLe score. Client Profile Database, MOHLTC, FY 2010/11, provided by the OACCAC; †NACRS, OHIP, RAI-MDS 2.0, FY 2010/11, provided by ICES; ††Commonwealth Fund International Health Policy Survey of Sicker Adults, 2011

IDEAS FOR IMPROVEMENT	PATIENT	POLICY	PROVIDER
Cost of service delivery:			
Process: Eliminate unnecessary tests and ineffective treatments. For example, OHTAC does not recommend the use of continuous glucose monitoring, combined with self-monitoring of blood glucose, for the management of insulin-dependent diabetes, because it is no more effective than self-monitoring of blood glucose alone.[155] OHTAC has also recommended that Continuous Insulin Infusion Pumps — a treatment for diabetes — not be used for people with type 2 diabetes and that the use of these pumps be further evaluated for effectiveness among people with type 1 diabetes.[156] Another example is OHTAC's recommendation against the use of routine cardiac MRI for the assessment of myocardial viability because of limited evidence for its diagnostic accuracy.[157] Similarly, routine vitamin D testing is not recommended because it is not clear that the test has clinical utility.[158] Consequently, it is important that high-quality, up-to-date evidence about these and other treatments and tests be considered when making decisions about OHIP coverage.		●	●
Measurement/feedback & decision support: Use **electronic ordering systems** that prompt for data on specific indications for a test, to evaluate appropriateness. For example, OHTAC suggests this for CT and MRIs for evaluation of headaches.[159]			●
Change in capacity and resources: Strengthen primary care services to relieve pressure on hospital acute care. Primary care providers can work to ensure effective prevention and management of chronic disease to prevent avoidable hospitalizations (see section 3).		●	●
Process: Reduce readmissions though better discharge processes (see section 8).			●
Process: Eliminate inefficient processes. For example, the Residents First initiative, supported by HQO, helped some LTC homes reduce unnecessary paperwork which enabled them to hire additional staff for more patient care.[160]			●
Right service in the right place:			
Process: To reduce ALC bed days, **prevent deconditioning in hospital** through activities like frequent rehabilitation.[161] See sections 3 and 4 for strategies that can help improve continence and prevent falls and pressure ulcers. Avoid discharging people to LTC homes directly from the hospital by adopting a Home First philosophy,[162] where hospital patients are discharged back home with the offer of additional home care services, so that important decisions about LTC placement or other supportive housing options can be made from home, not hospital.			●
Change in capacity and resources: Increase alternatives to LTC with home care or supportive housing. Supportive housing is a subsidized service that provides people living in a home-like environment with 24-hour assistance when needed if they require less care than that provided by LTC but more than that offered by home care.[163]		●	
Avoidable emergency department visits:			
Skills development: Increase LTC staff skills for diagnosing and managing low-acuity conditions within the home instead of sending the resident to the ED.			●
Resources: Consider using **nurse practitioners to provide on-call** services in LTC homes.[164] Consider **tele-monitoring services** to allow a physician or other provider to assess a resident from another location.[165]		●	●
Incentives/motivation: Consider strategies to **encourage on-call physicians to visit the LTC home** when asked to assess a resident.		●	●
Patient engagement: Educate residents and families about which situations can be safely dealt with at the home and which require a trip to the ED to decrease requests for transfers when not necessary.	●		●
Change in capacity and resources: Expand primary care models that provide after-hours care. For instance, Family Health Teams are required to offer after hours and weekend care.[166]		●	
Process: Promote advanced access scheduling, a scheduling method that aims to reduce wait time to see healthcare providers (see section 2).			●

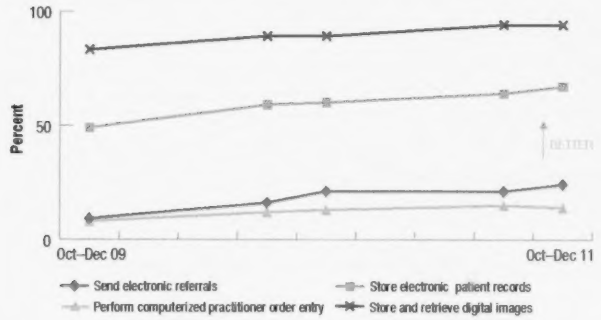
What is happening in Ontario?

- **HQO resources for improvement:** For more details on how to implement some of these ideas in long-term care homes please see the Residents First change guide on ED utilization (www.residentsfirst.ca). Visit HQO's website (www.hqontario.ca) for more details on the evidence behind recommendations against funding of certain services such as vitamin D testing and insulin pumps.
- Ontario has invested close to $1 billion in the Aging at Home Strategy to ensure better access to the continuum of community care services for seniors and their caregivers. The strategy helps Ontarians have healthy and independent lives by supporting those who wish to remain at home safely and with dignity. The aim is to find appropriate settings for patients ready for discharge from acute care facilities, which may relieve pressures on hospitals and LTC homes, avoid unnecessary visits to the hospital, reduce emergency department wait times and ultimately reduce ALC.

7 | Information technology and healthy work environments

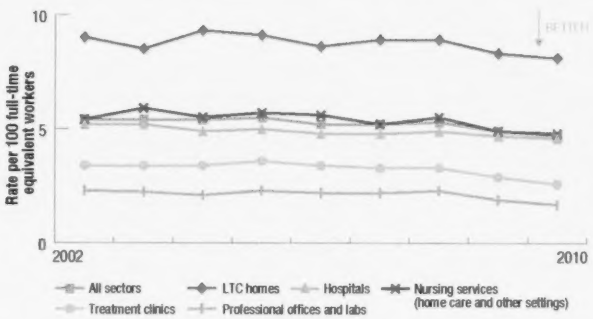
Information technology (IT) in health care involves secure computerized systems that facilitate the collection and management of health information while relaying it to health care providers.[167] Lack of health information and clinical data sharing among providers may hinder efficient communication and patient continuity of care.[168] A healthy work environment is a work setting that adopts a comprehensive approach to enable the work conditions that optimizes the wellbeing of providers, quality of care and organizational performance.[169,170] Unhealthy work environment could be associated with increased staff absenteeism, elevated turnover rates, decreased staff satisfaction and lower quality of care.[171,172,173,174,175]

% OF HOSPITALS THAT HAVE LIVE AND OPERATIONAL IT APPLICATIONS



Ontario hospitals are making steady progress in implementing IT internally. Almost all hospitals handle diagnostic images electronically now. However, there is still poor interconnectivity between hospitals and other healthcare organizations and providers; only 24%, for example, can send electronic referrals.

LOST-TIME AND NON-LOST-TIME INJURY RATES BY DIFFERENT HEALTHCARE SECTORS



After several years of little change, lost-time and non-lost-time injury rates have dropped since 2009 for healthcare workers in all settings. From 2009 to 2010, the largest decreases in injury rates were observed in professional offices and labs (-12%) and in treatment clinics (-11%).

INDICATOR		LATEST RESULT	PROGRESS?	WHERE COULD WE BE?
IT	% of hospitals that use IT applications to: – Send electronic referrals – Store electronic patient records – Do computerized practitioner order entry – Store and retrieve digital images	 24%* 67%* 14%* 94%*	Improved	No benchmarks available yet, but could be higher.
HEALTHY WORK ENVIRONMENTS	Lost-time and non-lost-time injury rates per 100 full-time-equivalent workers in: – All sectors – LTC homes – Hospitals – Nursing services (home care and other settings) – Treatment clinics – Professional offices and labs	 4.7** 8.1** 4.6** 4.8** 2.6** 1.7**	Recent improvement	No benchmarks available yet, but could be lower.
	% of home care primary caregivers experiencing feelings of distress and/or unable to continue in caring activities	21%***	Worse	Erie St. Clair has a rate of 16%.

Data source: *HIMSS Analytics database, Oct–Dec 2011, provided by OHA, data reflects all hospitals; **WSIB, 2010; ***Home Care Reporting System, FY 2010/11, provided by CIHI

IDEAS FOR IMPROVEMENT	PATIENT	POLICY	PROVIDER
Information technology:			
Develop a **business case for EMRs** to drive institutional adoption and implementation.[176]		●	●
Promote EHRs and EMRs capacity to improve productivity. Once integrated into a practice, an EMR can increase productivity by streamlining processes and reducing duplication, such as unnecessarily repeated tests and treatments.[177]		●	●
Develop and support **common data standards** at the national and provincial levels to facilitate data transfer among different systems.[178]		●	
Identify champions or leaders.[179] Healthcare providers who have experience with EMRs can reassure others that there are standard protocols to protect against computer problems or provide tips on how to implement an EMR more smoothly.			●
Healthy work environments:			
Measurement: Monitor injury rates and post them throughout the workplace.			●
Staff skills: Promote **health professional awareness campaigns** to reinforce health and safety messages, techniques and best practices. Such practices include proper lifting technique, looking for safety hazards and use of safety or protective equipment.[180,181] Ensure training programs to **prevent workplace violence** are in place.		●	●
Resources: Ensure healthcare facilities have invested in **safety equipment**. Examples include **mechanical lifts for transferring heavy patients** or **ergonomic work stations**.			●
Processes: Conduct periodic **risk assessments** to identify hazards in the workplace. Implement strategies to **mitigate the effects of shift work**.[182] Provide employees with information about sleep hygiene, and encourage strategies that can be used to reduce fatigue; consider altering shifts to make them more compatible with circadian rhythms and provide adequate recovery time between shifts, especially when rotating off night shifts.[183] Design call schedules so that there are **limits to on-call hours** to avoid injuries from fatigue.			●

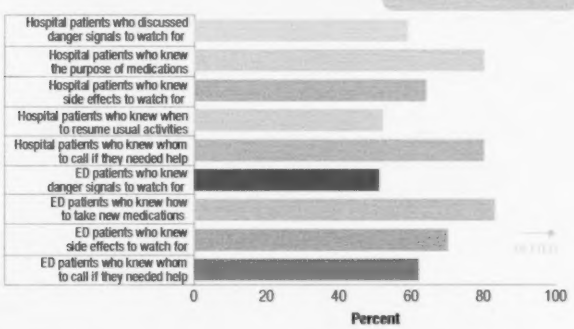
What is happening in Ontario?

- **HQO resources for improvement:** In collaboration with partners for standardized measures and reporting capability in primary care, HQO is currently developing recommendations for EMR content standards and vendor specifications. These recommendations may support performance measurement, feedback and reporting, as well as quality, effectiveness, efficiency and appropriateness of care.
- The OntarioMD program provides funding and technical support to physicians interested in adopting EMRs. To date, enrolment has reached more than 9,000 physicians caring for approximately 9 million Ontarians. The program has been extended to March 31, 2014 and will support 11,000 physicians by that time. The program was also expanded to include support for Nurse Practitioners in Nurse Practitioner Led Clinics.
- All 73 Community Health Centres (CHCs), 10 Aboriginal Health Access Centres and three NP-led clinics across Ontario are transitioning to a new-generation EMR that could improve information sharing among more than 3200 members of inter-professional teams. The enhanced system will allow a wider range of users to share information, including pharmacists, social workers, health promoters, physiotherapists and mental health workers. In addition, a bilingual feature may benefit patients from seven francophone and other bilingual communities across Ontario. The Association of Ontario Health Centres has procured a vendor, and deployment is expected to be completed by 2013/14.
- The Needle Safety Regulation under the *Occupational Health and Safety Act* requires all healthcare workplaces to use safety-engineered needles that are designed to eliminate or minimize the risk of needle punctures. This regulation was initially applied to hospitals and now has been extended to LTC facilities, doctors' offices and the entire healthcare system.
- The government of Ontario appointed the first Chief Prevention Officer (CPO) in 2011; the CPO will be responsible for developing a provincial occupational health and safety strategy, coordinating Ontario's workplace health and safety prevention system and providing advice on the prevention of workplace injuries and occupational diseases.

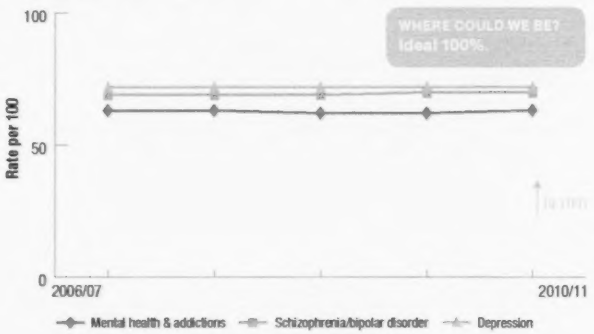
8 | Discharge/transitions from hospital and primary care

When people move from one provider or setting to another — for example, from a hospital back to the community — it is important that there is strong communication between sites and timely follow-up arranged. Lack of coordination between different providers may be associated with wasted resources, interrupted continuity of care, more errors, poor health outcomes and dissatisfied patients.[184,185] If instructions regarding the treatment or care plan upon discharge are unclear, it could result in deterioration in health or readmissions.[186]

PATIENT EXPERIENCE ON CONTINUITY AND TRANSITION OF CARE, 2010/11


WHERE COULD WE BE? Best Ontario hospitals reach 85%–90% on some questions.
Hospital patients who discussed danger signals to watch for
Hospital patients who knew the purpose of medications
Hospital patients who knew side effects to watch for
Hospital patients who knew when to resume usual activities
Hospital patients who knew whom to call if they needed help
ED patients who knew danger signals to watch for
ED patients who knew how to take new medications
ED patients who knew side effects to watch for
ED patients who knew whom to call if they needed help
0
20
40
60
80
100
Percent

% OF PATIENTS DISCHARGED FROM HOSPITAL FOR A MENTAL HEALTH CONDITION WHO HAD A PHYSICIAN VISIT 30 DAYS LATER



Many patients are not getting the information they need when leaving the hospital or ED. Only half of ED patients know what danger signs to look out for at home and only six in ten patients know whom to call if they need help. About half of hospital patients don't know when to resume normal activities. Although most patients know how to take their medications, about a third do not know what side effects to watch for. Addressing these gaps in information can help patients stay safe at home and avoid unnecessary return visits to hospital.

About one in three patients are not followed up by a primary healthcare physician within 30 days of discharge for a mental health or addictions condition. No major change has been seen in the past four years. The low rate of primary care follow-up could result in a repeat visit to the ED or readmission. By comparison, almost all Ontarian patients discharged from hospital following an acute myocardial infarction or heart failure had a follow-up physician visit within four weeks of leaving the hospital.

INDICATOR		LATEST RESULT	PROGRESS?	WHERE COULD WE BE?
DISCHARGE/ TRANSITIONS FROM HOSPITAL AND PRIMARY CARE	% of hospital patients who knew:			
	– Danger signs to watch for after going home	59%*		
	– Purpose of home medications	80%*	No change	85–90% (top hospitals in Ontario for questions on purpose of medications and whom to call for help).
	– Side effects of medications to watch for	64%*		
	– When to resume usual activities	52%*		
	– Whom to call if they needed help	80%*		
	% of ED patients who knew:			
	– Danger signs to watch for after going home	51%*		
	– How to take new medications	83%*		
	– Side effects of medications to watch for	70%*		
	– Whom to call if they needed help	62%*		
	% of sicker adults who report their regular doctor/general practitioner practice seems informed about:			
	– the care they received in hospital or after surgery	69%**	n/a	83% (UK).
	– the care they got from the specialist/consultant	73%**		87% (UK).
	% of patients discharged from hospital for the following mental health conditions who had a physician visit 30 days later:			
	– Any mental health and addictions	63%***	No change	Ideally, 100%.
	– Schizophrenia and bipolar disorder	70%***		
	– Depression	72%***		

Data source: *NRC-Picker patient satisfaction surveys, FY 2010/11, provided by the OHA; **Commonwealth Fund International Health Policy Survey of Sicker Adults, 2011; ***OMHRS, OHIP, RPD, FY 2010/11, provided by ICES

IDEAS FOR IMPROVEMENT Also consider all change ideas from section 5 – patient experience.	PATIENT	POLICY	PROVIDER
Discharge/transitions from hospital and primary care:			
Measurement: Conduct **continuous surveying** of questions related to discharge transitions. Feed this data back regularly to different units within the organization.			●
Process improvement: Provide **written discharge instructions** using simple language and translate where possible.[187] Use the **"teach-back"** method where staff ask patients to repeat discharge instructions to verify that they understand instructions.[188] Ensure there is a **documented timely follow-up appointment** with primary care and home care if needed, noted in the patient's chart.[189] Have a **"warm handoff"** between the most responsible physician in hospital and primary care provider, where they talk to each other to discuss the case, especially for those at high risk of readmission.[190] Consider **post-discharge phone calls** to the patient from the hospital.[191]			●
Change in resources: Consider use of **patient navigator or case manager** to ensure patients are able to follow through on discharge instructions or access services.[192]		●	●
Incentives: Consider setting expectations in **contracts or accountability agreements** with primary care providers around seeing post-discharge patients soon after discharge.[193] Similarly for hospital agreements, consider setting expectations for hospitals to improve on communication with patients and other providers at discharge.[194] **Set standards** for timely transmission of information from hospital to primary care — for instance, that the discharge summary should be dictated and transmitted on the day of admission. These standards could be reflected in expectations for reimbursement or accreditation.[195]		●	

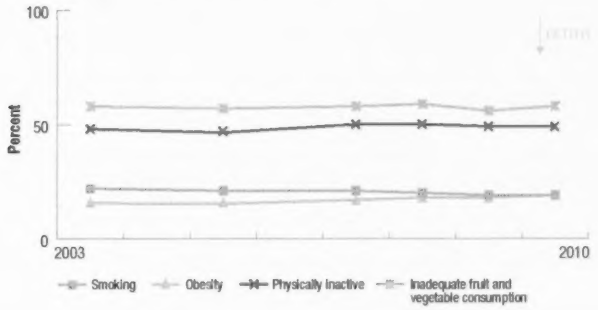
What is happening in Ontario?

- **HQO resources for improvement:** In 2012/13, HQO will be providing webinars and other supports to hospitals and other organizations interested in reducing readmissions and improving discharge transitions in their quality improvement plans.
- In 2011, The Local Health Integration Networks Collaborative (LHINC) published the Mental Health and Addictions Working Group Report *Through the Door*, which acknowledges challenges with transitions of care for people with mental health and addictions in Ontario. The LHINC Working Group has provided practical recommendations for Ontario's LHINs and health service providers, such as having in place a regional mental health and addictions network to improve transitions, an after-hours strategy, a protocol for urgent level of response and revised Alliance of Information and Referral Systems (AIRS) standards to determine which interventions are most relevant to improving transitions in its region.
- South West LHIN Transitions in Care is a pilot program that aims to enhance patient outcomes, reduce adverse events and reduce hospital readmissions. This initiative focuses on the role of a Care Transition Coach, a nurse practitioner who visits at-risk patients prior to hospital discharge and after their return home. The Care Transition Coach provides patient education, ensures that follow-up appointments are made and reconciles the patient's medications at home.
- Hospitals in Toronto are piloting Virtual Ward initiatives that provide time-limited intense home support and case management for discharged seniors who are at high risk of being readmitted to hospital. Seniors enrolled in Virtual Wards have access to constant in-home monitoring (e.g., blood pressure checks) and telephone access to a team of doctors, nurses and other healthcare workers.
- Central west LHIN has a "Bridging the Gap" pilot program that involves physician-to-physician discussions between the hospital most responsible physician and the family doctor. The ward clerk books a follow-up appointment with the patient's family doctor at the time of discharge.
- Ontario hospitals are piloting electronic Hospital Report Manager (HRM) systems that allow primary care providers who use a provincially-certified electronic medical record (EMR) system to directly access hospital discharge summaries. Over 1,000 physicians are currently receiving hospital reports directly into their EMRs and over 450,000 reports are being transmitted per month.

9 | Unhealthy behaviour, preventive measures, and deaths and harm that could be avoided by prevention

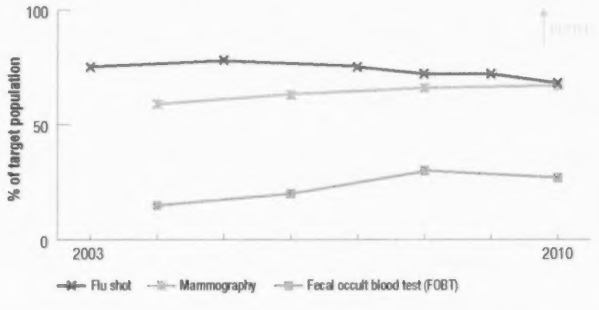
Keeping a healthy lifestyle is essential for maximizing health. Behaviours like smoking, poor diet and physical inactivity are associated with increased risk of illness, decreased life expectancy, lost productivity, social and emotional problems, escalated medical costs and poorer quality of life.[196] Preventive measures, such as screening for cancer and immunizations, are also important to achieving better outcomes with lower costs.[197,198,199] Suboptimal screening for cancer, for instance, is associated with missed opportunity of early disease detection, disease progression to critical stages, decreased survival rates, increased financial burden and more time spent recovering.[200,201]

HEALTH BEHAVIOURS IN ONTARIO, 2003–2010



Ontario has reduced smoking in the last decade, but there has been no improvement on physical inactivity or poor fruit and vegetable intake, and obesity is gradually getting worse. There is still room to improve, and British Columbia outperforms Ontario in many of these areas.

PREVENTIVE HEALTH MEASURES IN ONTARIO, 2003–2010



There is still room to improve the use of preventive measures. One-third of seniors did not receive a flu shot, one-third of eligible women did not have a mammogram and nearly one in four did not have a Pap test in the recommended time frame. Colorectal cancer screening has increased in recent years, but is still short of the provincial target of 40%.

Suicide rates have been stable over the past decade; suicide is more common in men than women. Hospitalizations for injury have decreased from 525 per 100,000 in 2002/03 to 417 in 2010/11. For both these indicators, there is room to improve.

INDICATOR		LATEST RESULT	PROGRESS?	WHERE COULD WE BE?
UNHEALTHY BEHAVIOUR	% of the population who smoke	19%*	Improved	17% (BC) or 16% (Central LHIN).
	% of the population (aged 20 and over) who are obese	19%*	Worse	13% (BC).
	% of the population who are physically inactive	49%*	No change	42% (BC).
	% of the population with inadequate fruit and vegetable intake	58%*	No change	44%[a] or 43%.[§,202]
PREVENTIVE MEASURES	% of people aged 65 and over who reported having a flu shot in past year	68%[†]	Worse	82%[b] and 81%.[α]
	% of women aged 50 to 69 who had a mammogram in past two years	67%[††]	Slight improvement	70% (Ontario's target, 2011).
	% of women aged 20 to 69 who had a Pap test in past three years	72%[†††]	Slight improvement	95% (Ontario's Cancer Plan target for 2020).[203]
	% of people aged 50 to 74 who reported having a fecal occult blood test (FOBT) in past two years	27%***	Improved	40% (Ontario's target, 2011).
PREVENTABLE HARM AND DEATHS	Acute myocardial infarction (AMI) incidence per 100,000 people aged 20 and over	200[γ]	Improved	138 (Toronto Central LHIN).
	Suicides per 100,000 people: – Overall	7.3**	No change	As low as possible.
	Injury-related hospitalizations per 100,000 people	417[γγ]	Improved	313 (Central LHIN) or lower.

Data source: *CCHS, 2010, provided by ICES; **Statistics Canada 2008, CANSIM table 102-0552, Deaths and mortality rate, by selected grouped causes and sex, Canada, provinces and territories, annual; accessed November 24, 2011; †CCHS, 2010, provided by ICES; ††Ontario Breast Screening Program, OCR, OHIP, RPD, 2009–2010, calculated by ICES, provided by CCO; †††Cytobase, OCR, OHIP, RPD, NACRS, DAD, 2008–2010, calculated by ICES, provided by CCO; ***OHIP, RPDB, 2009/10, provided by CCO; γDAD,RPD, FY 2009/10, provided by ICES; γγDAD, NACRS, RPDB, FY 2010/11 calculated by ICES, [a]Région de la Chaudière-Appalaches Quebec; [b]Région de l'Outaouais, Quebec; [§]Colchester-Hants, Nova Scotia; [α]Leeds-Grenville-Lanark, Ontario

IDEAS FOR IMPROVEMENT	PATIENT	POLICY	PROVIDER
Unhealthy behaviour:			
Ban or restrict use. Smoking has already been banned in public places.[204] Consider bans on junk food in schools, hospitals or workplaces.[205] **Regulate food content.** For example, New York City has banned trans-fats in restaurants.[206]		●	
Limit marketing of unhealthy behaviours. Smoking advertisements and tobacco company sponsorships have already been banned.[207] Consider limits on marketing of junk food in schools or other settings.[208]		●	
Mandatory labeling. Warning labels already exist on cigarette packages.[209] Consider similar warnings for unhealthy foods. Consider labeling caloric and salt content at restaurants as has been done in New York City.[210]		●	
Tax bad health habits. Taxes currently exist on cigarettes and alcohol.[211] Some jurisdictions tax unhealthy foods.[212]		●	
Aggressive health promotion. Use various mass media (TV, radio, print, billboards, social media, etc.) in different languages or designed for different literacy levels, to promote healthy lifestyle messages. Use well-respected role models to deliver messages.[213]		●	●
Offer **patient self-management** programs in primary care or the community.[214] Coach individuals to help them set their own action goals for changing health behaviours and identify barriers and solutions that work for them. Optimize use of **counselling and peer support programs**, particularly for substance abuse.[215] OHTAC has identified solid evidence for intensive (> 90 minute) counselling for smoking cessation.[216] Also, consider more specific educational interventions, such as grocery tours to help people identify healthy and unhealthy foods.[217]	●	●	
Establish healthy communities to help maintain healthy lifestyle. This could include walking trails or safe bike lanes to encourage exercise, safe neighborhoods in general to encourage walking, exercise programs or facilities, especially in communities with vulnerable populations, or easy access to supermarkets with fresh foods.[218]		●	
Promote healthy workplaces. Employers can consider offering physical activity programs for employees, and ensure healthy food and snack options for meetings.[219]		●	
Consider **subsidising treatment costs** (e.g., nicotine replacement therapy) for those without drug coverage.[220]		●	
Ensure **health care providers regularly ask about health behaviours** and encourage smoking cessation, healthy eating and exercise. Consider use of flowsheets or reminders in EMRs so that providers remember to do so.[221]			●
Preventive measures:			
Use registries for sending reminders to patients when they are due for a repeat test. Currently, the Ontario Breast Cancer Screening Program[222] and ColonCancerCheck[223] send written reminders to people who are due for screening. **Use EMRs to remind primary care providers** to call in a patient who is due for a test or vaccination.[224]		●	●
Launch **public awareness campaigns** to encourage health screening and vaccination.[225] Use different media (pamphlets, posters, videos, social media and advertisements) to deliver the message. Use easy-to-understand language tailored to the target population.[226]		●	●
Consider **incentives or accountability agreements** with primary care providers for percent of patients who are up to date on all preventive measures.[227]		●	
Implement injury prevention programs in the workplace, sports and the farming industry. Enforce **traffic safety** laws and implement safety features for roads and intersections. Mandate use of **safety equipment** (e.g., helmets). **Screen for domestic violence or abuse** in the workplace, schools or when patients present for other problems. Promote **child safety** and baby-proofing at primary care visits.	●	●	●
Preventable harm and deaths:			
Promote **screening and risk assessment** tools.[228] **Treat underlying mental health conditions** with therapy and medications. Publicize suicide **hotlines** and **crisis services**. Conduct **public anti-stigma campaigns** to encourage dialogue on mental health. Encourage **responsible media coverage** to prevent 'copycat' suicides.	●	●	●

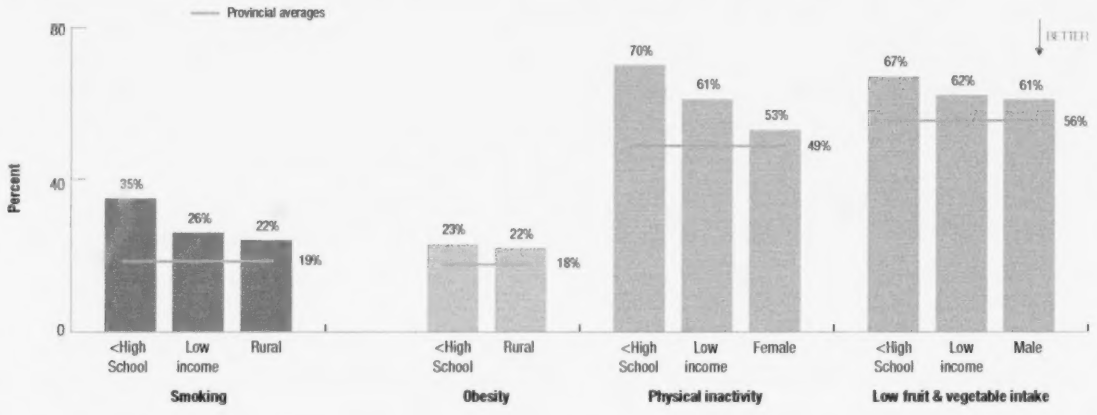
What is happening in Ontario?

- Starting in 2011, participating Family Health Teams (FHTs) will provide over-the-counter nicotine replacement therapy (NRT) such as nicotine patches and gum, combined with counselling, at no charge to patients who want to quit smoking.
- Cancer Care Ontario's Ontario Cancer Plan 2011–2015 aims, by 2015, to develop an integrated cancer screening strategy for breast, cervical and colorectal cancer, supported by a single information management/information technology system, and to provide primary care providers with reports, tools, mentorship and supports to enhance their screening performance.

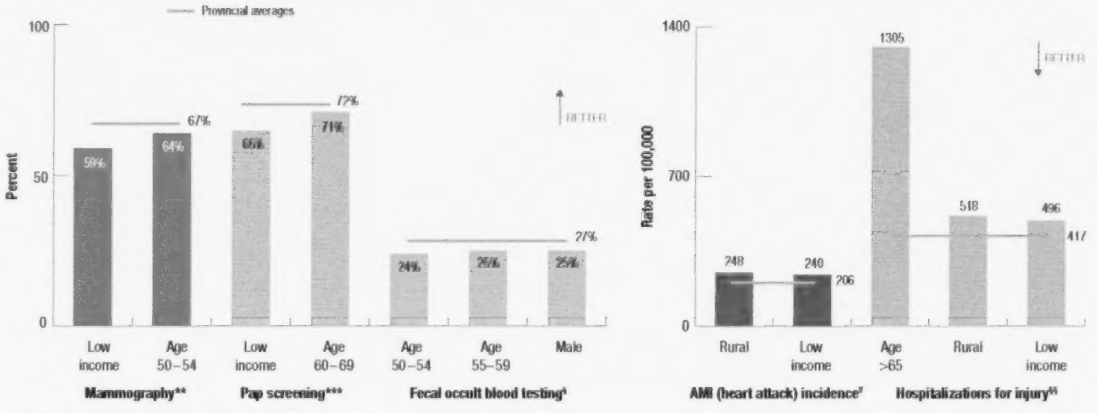
10 | Equity: Unhealthy behaviour, preventive measures, diseases that could be avoided with a population health focus

One of the fundamental characteristics of a high-performing healthcare system is being equitable.[229] Inequity in the system can increase the death rates, disabilities, distress and discomfort that can prove costly to the healthcare system while jeopardizing its sustainability.[230] Additionally, inequitable access to quality care among underserved people in society can be associated with lower health outcomes,[231] decreased productivity and increased burden on the system.[232]

DIFFERENCES IN HEALTH BEHAVIOURS BY INCOME, EDUCATION, GENDER OR RURAL STATUS*



DIFFERENCES IN PREVENTIVE MEASURES AND AMI INCIDENCE/INJURY HOSPITALIZATIONS BY INCOME, AGE OR RURAL STATUS



Vulnerable populations within Ontario continue to have greater difficulties maintaining a healthy lifestyle, use preventive services less frequently, and have worse health outcomes. People with low income[◊] and less education are at greatest risk. Rural persons are at greater risk of injury requiring hospitalization. Addressing these inequalities is essential to achieving excellent healthcare for all.

Data source: *CCHS, 2010, calculated by ICES; **OBSP, OCR, OHIP, RPDB 2009–2010 calculated by ICES, provided by CCO; ***Cytobase, OHIP, DAD, NACRS 2008–10 calculated by ICES, provided by CCO; ‡ OHIP, RPDB 2009–2010 calculated by ICES, provided by CCO; † DAD, RPDB, NACRS FY 2010/11, calculated by ICES; §§ DAD, NACRS, RPDB, FY 2010/11, calculated by ICES, ◊ defined as being in the lowest income quintile

IDEAS FOR IMPROVEMENT	PATIENT	POLICY	PROVIDER
For all:			
Conduct targeted health promotion and outreach for vulnerable groups. For persons with low literacy or education, ensure material uses graphics, simple English or local slang or the languages spoken by targeted communities.[233] Keep instructions simple and step-by-step. Bring activities to where people naturally congregate. To reduce disparities in Pap screening, develop and disseminate **culturally sensitive learning materials** in multiple languages that address myths about screening, emphasize the importance of the test and use credible spokespersons from the culture. Offer individuals the choice of a female healthcare provider.	●		●
Decrease cost barriers for low income persons. Make physical activity accessible to all through **low- or no-cost sports and recreation programs** and through increased physical education in schools.[234,235] Promote access to low-cost nutritious foods. Consider increasing access to **smoking cessation programs** that provide **free nicotine replacement** products like nicotine gum, sprays, patches or lozenges to people without drug coverage,[236] such as the STOP (Smoking Treatment for Ontario Patients) program[237] and the Ottawa Model for Smoking Cessation.[238] **Offer low-cost transportation and daycare for health promotion programs** and community outreach programs in order to increase their accessibility.	●	●	
Patient engagement: Promote patient self-management by systematic provision of education and supportive interventions to manage health problems by regular assessment of progress and problems, goal setting, problem solving and peer support. Also promote **free helplines** and websites for more information. The EatRight Ontario service offers nutrition advice from a registered dietician; visit www.ontario.ca/eatright or call 1-877-510-5102.	●		●
Healthy environments: Design communities for healthy living, with zoning that encourages walking to shops and supermarkets.[239] **Increase safety patrols**, if crime in low-income neighbourhoods is enough of a concern to prevent people from walking about.		●	
Rural injury prevention: Identify rural dangers such as common farming accidents and promote specific preventive measures. Farming and rural recreational activities like using all-terrain vehicles (ATVs) have high injury rates. Encourage use of safety gear (e.g., helmets) and proper training when using recreational vehicles.[240]	●	●	

What is happening in Ontario?

- The POWER Study (Project for an Ontario Women's Health Evidence-Based Report), funded by the MOHLTC, is intended to improve access to and quality of primary care. The study focuses on examining gender differences on a comprehensive set of evidence-based indicators such as access to primary care provider, barriers to care due to linguistic and cultural differences, satisfaction with quality of care and differences among women associated with socioeconomic status, ethnicity and geography.
- The MOHLTC has developed a Health Equity Impact Assessment (HEIA) Tool to advance health equity integration in healthcare policy, planning and decision making. HEIA maps the unintended *potential* health impacts of a policy, program or project on specific population groups (e.g., Aboriginal, francophone, gender, income, race and geography) and prompts the assessor to adjust the initiative to mitigate negative impacts and maximize positive impacts on affected populations.
- The Ontario Aboriginal Health Advocacy Initiative is a project of the Aboriginal Healing and Wellness Strategy to highlight inequitable access to quality, culturally appropriate health services for Aboriginal, First Nations and Métis people in the province. This program helps to train healthcare providers with systems of redress, protocols and approaches to deal with insufficient treatment facilities for Aboriginal patients in remote areas.

11 LHIN analyses

In this chapter, we present a performance summary for each of Ontario's fourteen (14) Local Health Integration Networks (LHINs), identifying where its performance is better or worse than average. Below each performance table is a separate table denoting the changes over time for each respective LHIN for a select set of indicators.

The 2012 Quality Monitor website (www.hqontario.ca) presents a more detailed list of indicators, corresponding data and colour coding to denote LHINs better than, at or worse than the provincial average. Differences were considered significant if they were both statistically[1] and clinically significant. We used the following guidelines to define significant differences:

TYPE OF INDICATOR	GUIDELINES FOR A CLINICALLY SIGNIFICANT DIFFERENCE BETWEEN A LHIN AND THE PROVINCIAL AVERAGE
Wait times	Relative difference of 25%
Rate of a serious adverse outcome	Relative difference of 25%
Percentage adoption of a best practice (process measure, often with a target of 100%)	Absolute difference of 5%[2]
Patient experience variable (e.g., percentage satisfied with x)	Absolute difference of 5%

Abbreviations used in this chapter are as follows:

ACSC: ambulatory care sensitive conditions

ALC: alternate level of care (in this case, a hospital bed occupied by someone who could be better served in a different setting, such as an LTC home)

AMI: acute myocardial infarction (heart attack)

CABG: coronary artery bypass graft

CHF: congestive heart failure

COPD: chronic obstructive pulmonary disease (emphysema or chronic bronchitis)

ED: emergency department

FOBT: fecal occult blood test

LHIN: local health integration network

LTC: long-term care

PCI: percutaneous coronary intervention

1. For some indicators where data were obtained from other parties, confidence intervals were not available, but statistical significance was inferred based on estimates of the sample size and assumptions about the probability distribution of the variable. See the technical appendix to this document at www.hqontario.ca for more details.
2. In some instances where the rate is high (e.g., 96%) but the target is clearly 100%, the difference is treated as defect (e.g., 4%) and a relative difference of 25% is considered significant (in this example, a difference greater than plus or minus 1% would be considered significant).

ERIE ST. CLAIR LHIN	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Shorter wait times for home care • Shorter wait times for CT and MRI scans, hip and knee replacement, cataract and high and low urgency cancer surgeries • Lower readmission rates for mental health-related conditions • Lower HIV incidence
Average results, still room to improve	• Wait times for LTC • Avoidable hospitalizations and avoidable ED visits by LTC residents • LTC safety and effectiveness – most indicators similar to provincial average but worse results for pressure ulcers • Home care safety and effectiveness (most indicators similar to provincial average) • ED wait times – similar to provincial average but shorter wait times for high complexity cases • Wait times for general surgery (shorter wait times for high-urgency cases) • Use of right drugs for hospital patients with AMI or CHF • Avoidable hospitalizations – ACSC and readmissions for any reason • AMI and stroke mortality rate • Percent ALC hospital bed days • Chronic disease management – most indicators at provincial average • Physician visits after mental health discharge from hospital • Routine eye exam for patients with diabetes • Preventive health screening • AMI incidence • Injury-related hospitalizations • ED visits for intentional self harm
Worse-than-average results, major room to improve	• Drug safety in complex continuing care – worse results for antipsychotic use • Longer wait times for most angiography cases but shorter wait times for elective cases • Unhealthy behaviour – worse results for smoking, and inadequate fruit and vegetable intake

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC-home placement (*fiscal Q4 2009/10 to fiscal Q4 2010/11*)		85	92	Worse
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	9.4	10	Worse
	Low complexity	4.5	4.5	No change
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		338	327	Slight improvement
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		11%	15%	Worse

SOUTHWEST LHIN	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Shorter wait times for angiography and PCI • Shorter ED wait times for high complexity cases • Lower percent ALC hospital bed days
Average results, still room to improve	• Wait times for LTC and home care • Avoidable hospitalizations and avoidable ED visits by LTC residents • LTC safety and effectiveness • Home care safety and effectiveness • Wait times for most CABG, general and cataract surgeries • Wait times for MRI and CT scans – mixed picture, with shorter waits for low-urgency cases but longer waits for high-urgency cases • Use of right drugs for hospital patients with AMI or CHF • Avoidable hospitalizations – ACSC and readmissions for any reason • AMI and stroke mortality rate • Chronic disease management – most indicators at provincial average • Unhealthy behaviours • Preventive health screening • AMI incidence • ED visits for intentional self harm • Routine eye exam for patients with diabetes
Worse-than-average results, major room to improve	• Higher rates of injury-related hospitalization • Longer wait times for cancer surgery • Longer wait times for knee and hip replacement (waits for low-urgency cases similar to provincial average) • Lower rates for physician visits after mental health discharge from hospital

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		94	93	Slight improvement
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	8.2	8.4	Slightly worse
	Low complexity	4.0	3.8	Improved
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		300	302	Slightly worse
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		12%	12%	No change

WATERLOO-WELLINGTON LHIN	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Lower rates of avoidable hospitalizations and avoidable ED visits by LTC residents • Shorter wait times for cancer, general and cataract surgeries, angiography, and hip and knee replacement • Use of right drugs for hospital patients with AMI
Average results, still room to improve	• Wait times for LTC • LTC safety and effectiveness – most indicators similar to provincial average • Home care safety and effectiveness – most indicators similar to provincial average • ED wait times • Wait times for CT and MRI scans, and CABG–mixed picture, with shorter wait times for low urgency MRI scans and CABG elective cases • Use of right drugs for hospital patients with, CHF • Avoidable hospitalizations – ACSC and readmissions for any reasons – but lower CHF readmission rates • AMI and stroke mortality rate • Percent ALC hospital bed days • Preventive health screening • AMI incidence • ED visits for intentional self harm • Injury-related hospitalizations • Unhealthy behaviours – most indicators at average; highest percentage of the population who are physically active • Chronic disease management – most indicators at provincial average • Physician visits after mental health discharge from hospital • Routine eye exam for patients with diabetes • Readmission rates for mental health-related conditions
Worse-than-average results, major room to improve	• Longer wait times for physician initial assessment and higher percentage of patients who left without being seen at ED • Longer home care wait times for referrals from the community

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		226	134	Improved
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	10.2	11	Worse
	Low complexity	5.3	5.1	Slight improvement
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		236	239	Slightly worse
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		18%	17%	Improved

HAMILTON-NIAGARA-HALDIMAND-BRANT LHIN	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Shorter home care wait times for referrals from hospital • Lower rate of avoidable ED visits by LTC residents • Shorter wait times for PCI • Lower readmission rates for mental health-related conditions
Average results, still room to improve	• Wait times for LTC • Avoidable hospitalizations by LTC residents • LTC safety and effectiveness • Home care safety and effectiveness – most indicators similar to provincial average • ED wait times • Wait times for cancer and cataract surgeries, hip replacement and CABG • Use of right drugs for hospital patients with AMI or CHF • Avoidable hospitalizations – ACSC and readmissions for any reason • AMI and stroke mortality rate • Percent ALC hospital bed days • Preventive health screening • AMI incidence • ED visits for intentional self harm • Injury-related hospitalizations • Chronic disease management – most indicators at provincial average but better results for elderly diabetic patients who regularly filled prescriptions for ACEI/ARBs or statins • Unhealthy behaviours • Physician visits after mental health discharge from hospital Routine eye exam for patients with diabetes
Worse-than-average results, major room to improve	• Drug safety in complex continuing care – worse results for antipsychotic use • Longer wait times for CT and MRI scans, angiography, knee replacement and general surgery

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		234	111	Improved
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	12.7	13	Slightly worse
	Low complexity	4.8	4.4	Improved
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		325	315	Slight improvement
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		21%	18%	Improved

CENTRAL WEST LHIN	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Shorter wait times for LTC • Drug safety in complex continuing care – better results for antipsychotic use • Shorter wait times for CT scans, angiography, hip replacement and cataract and general surgeries • Better use of right drugs for hospital patients with AMI • Lower percent ALC hospital bed days • Lower rate of ED visits for intentional self harm
Average results, still room to improve	• Home care wait times • LTC safety and effectiveness – most indicators similar to provincial average • Home care safety and effectiveness – most indicators similar to provincial average • Wait times for cancer surgery, MRI scans, and knee replacement • ED wait times – but longer waits for physician initial assessment • Use of right drugs for hospital patients with CHF • Avoidable hospitalizations – ACSC and readmissions for any reason • AMI and stroke mortality rate • Preventive health screening • AMI incidence • Injury-related hospitalizations • Chronic disease management – most indicators at provincial average. • Physician visits after mental health discharge from hospital • Routine eye exam for patients with diabetes • Readmission rates for mental health-related conditions
Worse-than-average results, major room to improve	• Higher rates of avoidable hospitalizations and avoidable ED visits by LTC residents

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		58	45	Improved
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	13.3	13	Slight improvement
	Low complexity	5.1	4.3	Improved
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		280	259	Improved
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		10%	10%	No change

MISSISSAUGA-HALTON LHIN	
Superior results, no room to improve	• Rate of statin use after an AMI surpasses 90% target
Better-than-average results, still room to improve	• Shorter home care wait times for referrals from the community • Shorter wait times for angiography and PCI • Lower rates of avoidable hospitalizations for ACSC and CHF readmissions for any reason • Fewer percent ALC hospital bed days • Shorter wait times for hip and knee replacement • Lower rates of ED visits for intentional self harm • Higher rates of physician visits after mental health discharge from hospital
Average results, still room to improve	• Avoidable hospitalizations and avoidable ED visits by LTC residents • Home care safety and effectiveness • ED wait times • Wait times for cancer and general surgeries, CT and MRI scans and CABG • Use of right drugs for hospital patients with AMI or CHF (lower use of beta blockers in CHF patients) • LTC safety and effectiveness – most indicators at provincial average • AMI and stroke mortality rate • Preventive health screening • AMI incidence • Injury-related hospitalizations • Chronic disease management – most indicators at provincial average • Unhealthy behaviours • Routine eye exam for patients with diabetes • Readmission rates for mental health-related conditions
Worse-than-average results, major room to improve	• Longer wait times for LTC • Longer wait times for cataract surgery

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		80	164	Worse
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	11.5	12	Slightly worse
	Low complexity	4.3	3.9	Improved
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		203	192	Improved
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		9%	11%	Worse

TORONTO CENTRAL	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Drug safety in complex continuing care – better results for antipsychotic use • Shorter wait times for cataract surgery, and hip and knee replacements • Lower percent ALC hospital bed days • Higher rates of physician visits after mental health discharge from hospital • Lower AMI incidence
Average results, still room to improve	• Wait times for LTC • Avoidable ED visits by LTC residents • LTC safety and effectiveness – most indicators at provincial average • Home care safety and effectiveness – most indicators at provincial average • Wait times for cancer surgery, CT and MRI scans and angiography • Wait times for PCI – mixed picture, lower percentage of urgent/semi-urgent cases completed within target but higher percentage of elective cases completed within target • Use of right drugs for hospital patients with AMI or CHF • Avoidable hospitalizations for ACSC • AMI and stroke mortality rate • Preventive health screening – most indicators at average but lower rates for mammography • ED visits for intentional self harm • Injury-related hospitalizations ED wait times • Chronic disease management – most indicators at provincial average • Unhealthy behaviours – most indicators at provincial average but lower obesity rates • Routine eye exam for patients with diabetes • Readmission rates for mental health-related conditions but higher rates for schizophrenia and bipolar disorder readmissions
Worse-than-average results, major room to improve	• Longer home care wait times for referrals from the community • Higher rate of avoidable hospitalizations by LTC residents • Healthy work environment in home care – worse results for distressed primary caregivers • Longer wait times for CABG and general surgery • Higher rates of pneumonia, COPD and diabetes readmissions for any reason • Highest HIV incidence

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		108	104	Slight improvement
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	15.2	13	Improved
	Low complexity	6.1	5.4	Improved
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		241	254	Worse
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		12%	11%	Improved

CENTRAL LHIN	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Drug safety in complex continuing care – better results for antipsychotic use • Shorter wait times for cancer, general surgery and cataract surgeries, angiography, PCI and hip and knee replacements • Lower rates of avoidable hospitalizations for ACSC • Lower AMI incidence • Lower rates of ED visits for intentional self harm • Higher rates of physician visits after mental health discharge from hospital
Average results, still room to improve	• Wait times for LTC and home care • Avoidable hospitalizations and avoidable ED visits by LTC residents • LTC safety and effectiveness – most indicators at provincial average • Home care safety and effectiveness – most indicators at average but better results for pressure ulcer • ED wait times • Wait times for CT and MRIS scans • Avoidable hospitalizations –readmissions for any reason • Stroke mortality rate • Percent ALC hospital bed days • Preventive health screening • Injury-related hospitalizations • Chronic disease management – most indicators at provincial average • Unhealthy behaviours – most indicators at provincial average • Routine eye exam for patients with diabetes • Readmission rates for mental health-related conditions
Worse-than-average results, major room to improve	• Longer wait times for CABG (waits for urgent patients similar to provincial average) • Higher AMI mortality rate

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		93	132	Worse
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	14.7	14	Improved
	Low complexity	4.4	3.9	Improved
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		181	180	Slight improvement
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		15%	16%	Worse

CENTRAL EAST LHIN	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Shorter wait times for angiography, PCI and general surgery
Average results, still room to improve	• Wait times for LTC and home care • Avoidable hospitalization and avoidable ED visits by LTC residents • LTC safety and effectiveness – most indicators at average but worse results for LTC falls resulting ED visits • Home care safety and effectiveness • ED wait times • Wait times cancer surgery, CT scans, and hip and knee replacements • Use of right drugs for hospital patients with AMI or CHF • Avoidable hospitalizations – ACSC and readmissions for any reason • AMI and Stroke mortality rate • Percent ALC hospital bed days • Preventive health screening • AMI incidence • ED visits for intentional self harm • Injury-related hospitalizations • Chronic disease management – most indicators at provincial average; the rates of elderly diabetic patients who regularly filled prescriptions for ACEI/ARBs or statins are better than average • Unhealthy behaviours – most indicators at provincial average but high rates of physical inactivity • Physician visits after mental health discharge from hospital Routine eye exam for patients with diabetes • Readmission rates for mental health-related conditions
Worse-than-average results, major room to improve	• Drug safety in complex continuing care – worse results for antipsychotic use • Longer wait times for MRI scans and cataract surgeries

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		126	127	Slightly worse
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	12.5	12	Slight improvement
	Low complexity	5.0	4.4	Improved
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		254	251	Slight improvement
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		18%	20%	Worse

SOUTH EAST LHIN	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Lower rates of avoidable hospitalization by LTC residents • Shorter wait times for CT scans and CABG for most indicators • Lower rates of physical inactivity
Average results, still room to improve	• Wait times for LTC • Avoidable ED visits by LTC residents • LTC safety and effectiveness – most indicators at provincial average • Home care safety and effectiveness • ED wait times • Wait times for cancer and cataract surgeries • Wait times for angiography – a mixed picture with longer waits for urgent cases and shorter waits for electives • Wait times hip and knee replacements – mixed picture with longer waits for urgent cases • Use of right drugs for hospital patients with AMI or CHF • Avoidable hospitalizations – ACSC and readmissions for any reason (but lower rate for stroke readmissions) • Percent ALC hospital bed days • Preventive health screening • AMI incidence • ED visits for intentional self harm • Injury-related hospitalizations • Chronic disease management – most indicators at provincial average • Routine eye exam for patients with diabetes • Readmission rates for mental health-related conditions
Worse-than-average results, major room to improve	• Longer wait times or home care referrals from community • Longer wait times for MRI scan and general surgery • Higher AMI and stroke mortality rate • Lower rate of physician visits after mental health discharge from hospital • Higher rate of smoking

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		71	92	Worse
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	9.4	9.4	No change
	Low complexity	4.2	4.0	Improved
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		317	331	Slightly worse
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		17%	14%	Improved

CHAMPLAIN	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Lower rates of avoidable hospitalization by LTC residents • Drug safety in complex continuing care – better results in antipsychotic use • Higher rates of physician visits after mental health discharge from hospital • Higher rates of Pap test and FOBT
Average results, still room to improve	• Home care wait times • Avoidable ED visits by LTC residents • LTC safety and effectiveness – most indicators at provincial average • Home care safety and effectiveness • ED wait times • Wait times for cancer surgery, MRI scan • Wait times for CABG – mixed picture with higher percentage of elective cases completed within target • Use of right drugs for hospital patients with AMI or CHF • Avoidable hospitalizations – ACSC and readmissions for any reason • AMI and stroke mortality rate • Percent ALC hospital bed days • AMI incidence • ED visits for intentional self harm • Injury-related hospitalizations • Unhealthy behaviours – most indicators at provincial average but lower rates for physical inactivity • Routine eye exam for patients with diabetes
Worse-than-average results, major room to improve	• Longer wait times for LTC • Longer wait times for CT scan, angiography, PCI, general and cataract surgeries, and hip and knee replacements

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		237	163	Improved
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	12	12	No change
	Low complexity	5.2	5.1	Slight improvement
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		257	257	No change
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		16%	16%	No change

NORTH SIMCOE MUSKOKA LHIN	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Shorter wait times for CT scan
Average results, still room to improve	• Wait times for LTC • Avoidable hospitalizations and avoidable ED visits by LTC residents • LTC safety and effectiveness – most indicators at provincial average • ED wait times • Wait times for cancer surgery, MRI scan, and general and cataract surgeries (but lower percentage of high urgency cases completed within target for cataract surgeries) • Use of right drugs for hospital patients with CHF • Avoidable hospitalizations – ACSC and readmissions for any reason • AMI and stroke mortality rate • Percent ALC hospital bed days • Chronic disease management – most indicators at provincial average • Unhealthy behaviours – most indicators at provincial average • Routine eye exam for patients with diabetes • Home care safety and effectiveness – most indicators at provincial average but worse results for pressure ulcers • Preventive health screening
Worse-than-average results, major room to improve	• Longer wait times for home care for referrals from community • Healthy work environment in home care– higher percentage of distressed caregivers • Longer wait times for hip and knee replacements • Fewer prescriptions for the right drugs for hospital patients with AMI • Higher AMI incidence • Higher rates of injury-related hospitalizations • Higher rates of ED visits for intentional self harm • Lower rates of physician visits after mental health discharge from hospital

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		219	86	Improved
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	9.6	9.3	Slight improvement
	Low complexity	4.3	4.0	Improved
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		317	314	Slight improvement
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		20%	19%	Improved

NORTHEAST LHIN	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Shorter wait times for MRI scans, CABG and PCI • Lower rates of physical inactivity
Average results, still room to improve	• Avoidable hospitalizations and avoidable ED visits by LTC residents • LTC safety and effectiveness • Home care safety and effectiveness – most indicators at provincial average but better results for declining/failure to improve bladder function • ED wait times • Wait times for CT scans, and general and cataract surgeries • Wait times for angiography – a mixed picture, with higher urgent/semi-urgent cases completed within target • Use of right drugs for hospital patients with AMI or CHF • Avoidable hospitalizations –readmissions for any reason • Stroke mortality rate • Routine eye exam for patients with diabetes • Preventive health screening
Worse-than-average results, major room to improve	• Longer wait times for LTC • Drug safety in complex continuing care – worse results for antipsychotic use • Longer wait times for hip and knee replacements and cancer surgery • Higher rates of hospitalizations for ACSC • Higher AMI mortality rates • Higher percent ALC hospital bed days • Higher AMI incidence • Higher rates of injury-related hospitalizations • Higher rates of ED visits for intentional self harm Chronic disease management – worse results for most indicators • Lower rates of physician visits after mental health discharge from hospital • Higher rates of smoking

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		151	153	Slightly worse
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	8.8	9.7	Worse
	Low complexity	3.9	4.0	Slightly worse
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		491	476	Slight improvement
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		28%	35%	Worse

NORTHWEST LHIN	
Superior results, no room to improve	• None
Better-than-average results, still room to improve	• Shorter wait times for cancer surgery, and CT and MRI scans • Lower percentage of cases left without being in ED • Lower rates of physical inactivity
Average results, still room to improve	• Home care wait times • Avoidable ED visits by LTC residents • LTC safety and effectiveness – most indicators at provincial average but worse results for pressure ulcers • Home care safety and effectiveness – most indicators at provincial average but better results for unexplained injuries • ED wait times – but shorter waits for physician initial assessment • Wait times for angiography, cataract surgeries, and hip and knee replacements • Wait times for PCI – mixed picture, with lower percentage of urgent cases completed within target • AMI and stroke mortality rate • Routine eye exam for patients with diabetes • Preventive health screening
Worse-than-average results, major room to improve	• Longest wait times for LTC • Avoidable hospitalizations by LTC residents • Healthy work environment in HC – higher percentage of distressed caregivers • Longer wait times for general surgery • Fewer prescriptions for the right drugs for hospital patients with AMI or CHF • Higher rates of avoidable hospitalizations –for ACSC, and COPD and CHF readmissions for any reason • Higher percent ALC hospital bed days • Higher AMI incidence • Higher rates of injury-related hospitalizations • Higher rates of ED visits for intentional self harm • Chronic disease management – higher complications rate for patients with diabetes but similar to provincial average for diabetes drug management • Unhealthy behaviours – higher percentage of obesity and inadequate fruit and vegetable intake • Lower rates of physician visits after mental health discharge from hospital

CHANGES OVER TIME:		2009/10	2010/11	CHANGE
Median number of days to LTC home placement (*Fiscal Q4 2009/10 to Fiscal Q4 2010/11*)		171	269	Worse
90th percentile length of stay for ED patients: (*FY 2009/10 to FY 2010/11*)	High complexity	9.5	9.8	Slightly worse
	Low complexity	3.8	3.8	No change
Hospitalization admission rate per 100,000 population for ambulatory care sensitive conditions (*FY 2009/10 to FY 2010/11*)		529	532	Slightly worse
Percentage of acute care bed days which are designated as alternative level care (ALC) (*FY 2009/10 to FY 2010/11*)		18%	22%	Worse

12.1 Examples of success

Alternate Level of Care (ALC)

ORGANIZATION

Northumberland Hills Hospital is a large community hospital in Cobourg, serving a catchment area of approximately 60,000 residents, of whom almost 20% are aged 65 and older.

AIMS AND MEASURES

- Implement a multi-pronged ALC strategy in order to fill a service gap for frail seniors, preventing de-conditioning, premature discharge or inappropriate designation as ALC, all of which can result in transfer to long-term care.
- Decrease acute care ALC rate from 36% to 17%.
- Decrease readmission rates within 30 days of discharge from the Restorative Care Program (RCP).
- Target RCP length of stay to 42 days or less.
- Discharge more than 50% of RCP patients home.

CHANGE IDEAS

Change in location, resources and capacity

- Closed 16 acute ALC beds and seven complex continuing care beds. Opened a 16-bed RCP unit, where seniors who were too frail to go home after an acute event received more intensive therapy with the aim of discharging them back home.

Clinical decision support

- Used Blaylock Discharge Risk Assessment to identify patients in acute care at risk for complex discharge, with high scores triggering automatic referral to a CCAC case manager and inter-professional team members. Scores were used at interdisciplinary daily bullet rounds to facilitate patient flow and timely discharge.
- Completed a Home First Investigation Form for all new ALC patients to determine root cause of ALC.
- Used Goal Attainment Scale on admission to RCP for individual goals and care plan.
- Used patient/family discharge planning checklist on admission.

Process improvement

- Implemented the Hospital Elder Life Program (HELP), which includes a series of standard processes aimed at preventing the elderly from de-conditioning while in hospital or developing delirium. Examples include daily volunteer visitor program with structured cognitive stimulation, daily exercise and walking assistance, sleep enhancement strategies, hearing and vision aids, feeding assistance and dehydration prevention.
- Used Lean methodology with involvement of interdisciplinary team members, community partners and patient/caregiver representatives to design and implement the Restorative Care Program. This process involved a Value Stream Analysis and four Kaizen events to explore various aspects in the development of the program, with emphasis on practice elements such as person-centred care, gerontological best practices, interprofessional practice, wellness and chronic disease prevention and management, clinical leadership and community partnerships.
- Information was reviewed weekly with CCAC and community support service.
- Performed interprofessional discharge planning and used the "teach-back" method to ensure patients understand discharge instructions.
- Ensured follow-up appointments with primary care physician were scheduled at discharge.

Skills development

- Introduced Clinical Nurse Specialists in acute and post-acute care involved in care of complex patients and in knowledge transfer to promote gerontological best practices among service providers.

Patient engagement

- Established case conferences with patient, family and team on admission, with follow-up discharge support meetings throughout hospital stay as required in order to address barriers to discharge.

Measurement and feedback

- Outcome data shared quarterly with interprofessional team.

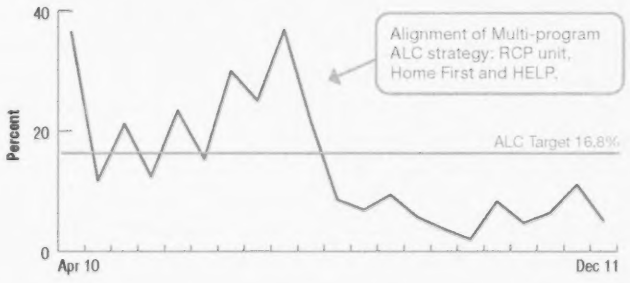
RESULTS

- Monthly acute care ALC decreased from 36% (April 2010) to 5% (December 2011).
- Quarterly acute care ALC rate decreased from 23% (Apr-Jun 2010) to 7.4% (Oct-Dec 2011).
- Monthly RCP readmission rate decreased from 11% (April 2011) to 6.3% (November 2011).
- RCP length of stay ranged from 18 to 21 days.
- Percent discharged home from RCP ranged from 60% to 88% per month.

NEXT STEPS

- Initiate Readmission Risk Screening Tool pilot on the rehabilitation unit with family meetings for each patient identified as high risk. Expansion of tool to all clinical areas.
- Pilot a patient navigator role in rehabilitation with the goal of implementing this role in other programs.
- Plan a visual management system, including electronic utilization data, electronic interprofessional board and electronic patient board, to improve patient flow.
- Continue the use of Clinical Nurse Specialists to continue knowledge transfer of gerontological best practices.
- Attain access to geriatrician and geriatric psychiatrist consultation.
- Use monitoring of delirium and functional decline in the elderly, in response to the implementation of HELP.

NORTHUMBERLAND HILLS HOSPITAL ACUTE CARE ALC PERCENT BY MONTH



12.2 Examples of success

Access

ORGANIZATION

As part of the London Health Science centre and the Thames Valley Family Health Team, the Byron and Victoria Family Medical centers provide a comprehensive, interdisciplinary approach to primary healthcare. The team includes 14 physicians, as well as registered nurses, a nurse practitioner, a psychologist, social workers, a reception clerk and medical residents.

AIMS AND MEASURES

- Reduce wait times for an appointment, as measured by the time to third-next-available appointment.
- Decrease patient no-shows, measured by the average missed-appointment rate.

CHANGE IDEAS

Measurement and feedback

- Measure the third-next-available appointment and continuously present the results for the team members.

Process improvement

- Conduct weekly staff meetings with physicians to anticipate patients' needs and plan changes in daily workflow to better manage appointment supply and patient demand.
- Develop patient-scheduling template in EMRs to book appointments with respect to availability of the physician.
- Improve the appointment-scheduling process by adjusting appointment time depending on the stability of patient condition and internal capacity.
- Introduce patient-appointment card system to remind patients for specific date and time for the subsequent visit.
- Identify patients with memory impairment and special needs to re-book appointment for subsequent check up and remind them about the appointment.

Skills development

- Educate reception staff, nurse and residents to manage patient information EMR template.
- Provide script to patients to clarify the procedure to book appointment on advanced-access patient-booking system.

Incentives/motivation

- Motivate the quality improvement team by celebrating success during monthly and quarterly meetings.
- Encourage family medicine residents to practice in the Medical Centre to increase providers' capacity for new patients.

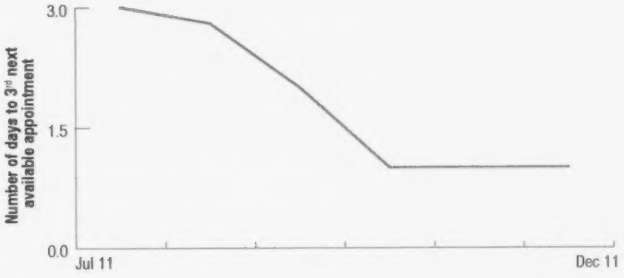
Change in location, resources and capacity

- Reallocate tasks among the team to free up some time for registered nurses to do counselling for on-site visit patients and reduce triage calls.

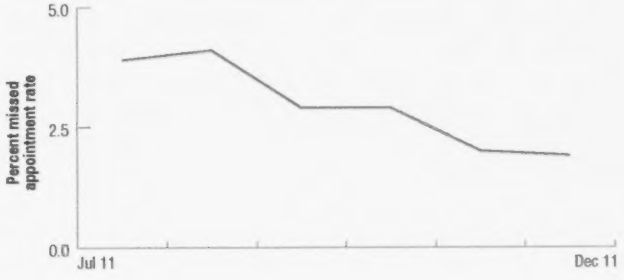
RESULTS FOR VICTORIA FAMILY MEDICAL CENTRE

- Decrease in the number of days to third-next-available appointment from three days in July 2011 to one day in December 2011.
- Decline in the missed-appointment rate from 3.9% in July 2011 to 1.9% in December 2011.

VICTORIA FAMILY MEDICAL CENTRE THIRD NEXT AVAILABLE RATE



VICTORIA FAMILY MEDICAL CENTRE MISSED APPOINTMENT RATE



12.3 Examples of success

Chronic Obstructive Pulmonary Disease (COPD)

ORGANIZATIONS

The London Family Health Team (FHT) includes 10 physicians, as well as registered nurses, nurse practitioners, dietitians, and social workers. The Credit Valley FHT is a group of family physicians, residents and health professionals who provide primary care services to approximately 9,000 patients in the Mississauga area. These inter-professional primary healthcare teams work to improve the quality of life for patients through prevention, identification and management of disease.

AIMS AND MEASURES

- Improve the rate of COPD screening, measured by percentage of smokers and ex-smokers who are screened using the Canadian Lung Health Test and referred to spirometry if needed.
- Improve smoking cessation rates among COPD patients, measured by percent of COPD patients who are not currently smoking at their most recent visit.
- Reduce exacerbations for patients diagnosed with COPD, measured by percent of patients in the COPD roster with one exacerbation in past 12 months.

CHANGE IDEAS

Measurement and feedback

For both FHTs

- Encourage outcome performance measurement feedback through reviewing monthly reports and posting statistical results.

Process improvement

For both FHTs

- Implement the Canadian Lung Health Test, a standardized questionnaire developed by the Canadian Lung Association to identify and screen patients at risk for COPD. Incorporate spirometry testing in the practice and refer patients identified as being at risk for COPD.
- Promote effective communication by holding weekly huddle meetings and monthly communication meetings to assess changes in clinical workload, identify relevant issues and discuss plans for improvement.

For London FHT

- Enable EMR reminders to screen patients for COPD.
- Create and share with providers the flow chart for the process for referring patients for spirometry testing.
- Implement web-based EMR software and templates that endorse standardized, evidence-based care for COPD management.

For Credit Valley FHT

- Implement EMR software drop-down forms and templates that endorse standardized, evidence-based care for COPD management and enable data tracking.
- Redistribute tasks among front-line staff to access the Smoking Cessation Program and help screen for COPD with CLHT questionnaire.
- Introduce tear-off referral pads to book an appointment for spirometry screening and yearly repeat, COPD education and follow up and smoking cessation counseling.

Skills development

For both FHTs

- Encourage physicians and inter professional healthcare providers to undertake Training Enhancement in Applied Cessation Counselling and Health (TEACH) to improve smoking-cessation counselling for clients and patients.

For London FHT

- Conduct educational sessions on effective COPD management.
- Promote training sessions to demonstrate best practice in
- spirometry technique.
- Encourage capacity building by training registered nurses on spirometry testing.
- Encourage staff to access Health Quality Ontario online resources for improving COPD management.

For Credit Valley FHT

- Conduct educational sessions on effective COPD management, smoking cessation and lung-health programs.
- Encourage physicians and residents to attend Continuing Medical Education (CME) that includes the Ottawa Model for Smoking Cessation (OMSC).
- Encourage nurse practitioners and registered nurses to undertake training to become Certified Respiratory Educators (CREs).

Incentives/ motivation

For both FHTs

- Motivate the quality-improvement team by celebrating successes during monthly and quarterly meetings.

For Credit Valley FHT

- Share monthly statistics using emails, newsletter to acknowledge administrative and clinical teamwork.
- Ensure face-to-face acknowledgement of clinicians by program leaders.

Change in location, resources and capacity

For Credit Valley FHT

- Allocate 0.5 FTE pharmacist to lead the team's smoking-cessation program and 0.1 FTE administrative support for OMSC program.

Patient engagement

For London FHT

- Encourage patient engagement by providing a clear action plan identifying at least one goal to achieve.
- Promote patient education and provide resources and brochures developed by the Canadian Lung Association.

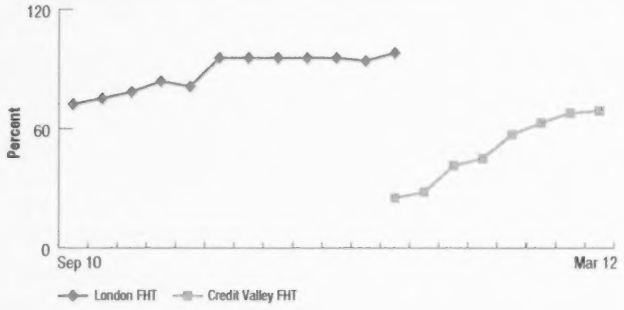
For Credit Valley FHT

- Raise awareness on COPD risk and management by introducing posters and education material in examination room and profiling Lung Health Programs on the FHT website.

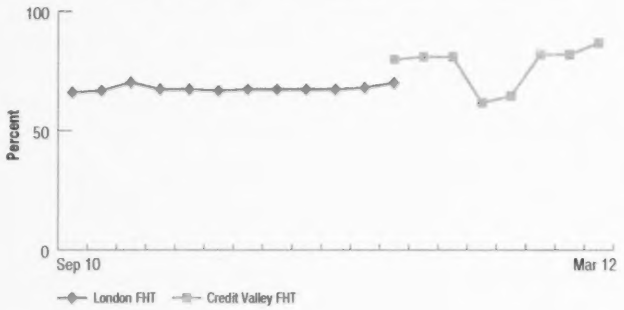
RESULTS

- Percent of smokers and ex-smokers over 40 years of age screened for COPD increased from 72.2% in September 2010 to 98% in August 2011 for London FHT, and 25.2% in August 2011 to 69% in March 2012 for Credit Valley FHT.
- Percent of COPD patients who reported that they are not currently smoking at their most recent visit increased from 66% in September 2010 to 70% in August 2011 for London FHT, and 80% in August 2011 to 87% in March 2012 for Credit Valley FHT.
- Percent of COPD patients with one exacerbation in past 12 months at London FHT decreased from 27.66% in September 2010 to 8% in August 2011.

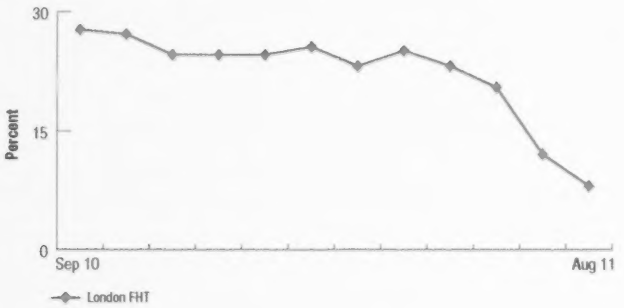
PERCENTAGE OF SMOKERS AND EX-SMOKERS OVER 40 YRS SCREENED WITH CANADIAN LUNG HEALTH TEST



PERCENTAGE OF COPD PATIENTS REPORTED NOT SMOKING



PERCENTAGE OF PATIENTS WITH ONE EXACERBATION IN PAST 12 MONTHS



12.4 Examples of success

Other successes

TOPIC		NAME OF INSTITUTION	MEASURE	TARGET	BASELINE	MOST RECENT VALUE	RELATIVE IMPROVEMENT	CHANGE IDEA
ACUTE CARE	ED/ALC	**Ross Memorial Hospital**	Average ALC patients per day at RMH	10% relative reduction as set out in the hospital's quality improvement plan	37.4 for 2010–11	33.1 in Dec. 2011	**12%**	Geriatric care is enhanced through the champion model of knowledge transfer, integrating geriatric best practices across acute care and throughout the interdisciplinary team. GERI Acute service led by a nurse specialist in geriatrics. Core team partners include Geriatric Emergency Management (GEM) Nurse, physiotherapist, occupational therapist, rehab assistants, recreation therapist and mental health psychogeriatric nursing outreach.
	STROKE READMISSIONS	**Southlake Regional Health Centre**	Same diagnosis 30-day readmission rate for stroke/TIA	The target for 2011–12 FY is 1%	3.1% in FY 2009–10	0.7% in Apr.–Nov. 2011	**77%**	Weekly inter-professional team goal setting rounds, including CCAC case managers. Use of weekend passes for challenging discharges to assess unique support needs for patient and family. Strong linkages between stroke prevention clinic (SPC) NPs and in-patient medicine programs, partnership of SPC with cardiac rehab to incorporate chronic disease management model of care, patient empowerment and self-management and support for healthy lifestyle changes. Referral to SPC upon discharge.
PRIMARY CARE	ADVANCED ACCESS AND EFFICIENCY	**Huron Community Family Health Team**	Office visit cycle time	20 minutes	The Office visit cycle time was 62 minutes in Jan. 2011	20 minutes in Oct. 2011	**68%**	Office practice redesign to identify complex patients and assist them with appropriate booking time. Introduce *huddle* meeting to brief plans, review work and share information with nurse and physician staff before the start of clinic hours. Use EMRs to store patient reports and provide physician with easy access to patient history. Provide booking card to each patient to improve communication between reception and patient to book next appointment.
		St. Joseph's Health Care London	Average time to third-next appointment	1–3 days	Average rate of 19.5 days for all five teams on April 20th 2011	Average rate of 3.4 days for all five teams on Dec. 15th, 2011	**83%**	Revised appointment template to improve scheduling. Increased medical residents' and physicians' work hours to reduce backlog. Identified patients with high visit rates to improve appointment demand. Weekly data review for 3rd-next appointment. Publish success stories in hospital newsletter to compliment staff. Educated patients on open access booking and conducted patient satisfaction survey based on five-point Likert scale.

TOPIC		NAME OF INSTITUTION	MEASURE	TARGET	BASELINE	MOST RECENT VALUE	RELATIVE IMPROVEMENT	CHANGE IDEA
HOME CARE	ALC	**South East CCAC**	ALC/LTC conversion rate/day	10% reduction in ALC/ LTC conversion rate over the baseline	27% (Dec. 2009–Dec. 2010)	18% (Jan. 2011)	**9%**	Completion of implementation of the Home First approach, early activation and geriatric care plans implementation for patients with complex mobility needs, introduction of risk screening during the early activation process for consistent identification of potential ALC patients; it is through these interventions that this project aim was established for this subset of patients.
	ED WAIT TIMES	**Central West CCAC**	% of admitted ER patients who go to a unit within eight hours (LOS)	89%	79%	90%	**14%**	Discharge coordination begins on hospital admission, expediting process and preparing client/family for smooth transition. Having the same person manage beds and discharge allows for holistic view of system needs. Transitional case manager role is expected to continue to evolve as new approaches to care are tested. Improved physician buy-in for discharge planning process and ED utilization.
LONG-TERM CARE	RESTRAINT USE	**Trillium Manor**	Number and percent of residents restrained	Relative decrease of 30% in number and percent of residents restrained	31 residents (June 2010) and 19% of residents (four-quarter average, Q1 2010)	7 residents (December 2010) and 5.6% of residents (four-quarter average, Q4 2011)	**77% and 71%**	Purchased high/low beds with non-restraining side rails (40 over a two-year period); residents who required both side rails for safety were given priority for these beds. Created policy that restraints can only be initiated if approved by Nursing Management Team. Educate staff about the new policy and risks and benefits of restraint use, including the impact on the quality of residents' lives. Restraint education is now presented to new staff during the orientation process and reviewed annually with all direct care staff. When families request restraints, provide education to increase awareness about the risks.

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MANDATE

Health Quality Ontario (HQO) is a government agency, created under the *Commitment to the Future of Medicare Act* on September 12, 2005.

In June 2008, the Ontario government tasked Health Quality Ontario with measuring and reporting to the public on the quality of long-term care and resident satisfaction. In December 2008, Health Quality Ontario was tasked with measuring and reporting to the public on the quality of home care services and client satisfaction with these services.

On June 8, 2010, **The Excellent Care for All Act** was passed in the legislature expanding Health Quality Ontario's role and mandate. The functions of Health Quality Ontario are:

(a) to monitor and report to the people of Ontario on,
  (i) access to publicly funded health services,
  (ii) health human resources in publicly funded health services,
  (iii) consumer and population health status, and
  (iv) health system outcomes;

(b) to support continuous quality improvement;

(c) to promote health care that is supported by the best available scientific evidence by,
  (i) making recommendations to health care organizations and other entities on standards of care in the health system, based on or respecting clinical practice guidelines and protocols, and
  (ii) making recommendations, based on evidence and with consideration of the recommendations in subclause (i), to the Minister concerning the Government of Ontario's provision of funding for health care services and medical devices

Section 5 of the Act requires Health Quality Ontario to deliver a yearly report to the Minister on the state of the health system in Ontario, and any other reports required by the Minister.

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